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Modernizing the UGC

The University Grants Committee sat down yesterday to think about the future of the universities and, just as important perhaps, its own future. The two have become almost the same. Over the last 10 years, but most swiftly and dramatically since 1981, the UGC has been transformed into a powerful agency that commands the future of the universities to a degree that would have appeared remarkable and even sinister a generation ago.

For the first time in the history of Britain's universities it is possible to regard them as constituent parts of a centralized national system. They may still be spared the intense and constant bureaucratic regulation familiar in the rest of Europe but the substance of national direction is little different. The UGC is the instrument of this direction. It has long since ceased to be the president or, in more recent post-war years, the executive secretary of an almost voluntary club of autonomous institutions; it has become a planning board and bureaucratic agency through which national needs and demands are transmitted to the universities, and rather more feebly the wishes of the universities are retransmitted to the Government.

This is an unflattering description from which many members of the UGC itself and both ministers and civil servants within the Department of Education and Science would instinctively recoil. But it is one that is perhaps more recognizable to many people than the official image of the UGC. It has fought hard to retain the clubbable pattern of policy making and to resist the more aggressively imposed intentions of its good if unrealistic intentions. A degree of benign paternalism, of course, has always been part of the relationship between the UGC and the universities but the committee is deeply unhappy with the "Big Brother" role that has been thrust upon it.

In a similar way Sir Keith Joseph must be almost as unhappy at having to preside over, and in important ways to encourage, a probably irreversible shift in the character of the British university system away from a loose association of free institutions and towards a centralized bureaucratic system in which all impulses come from the centre. After all, he is meant to be curbing the power of the state, not increasing it. So he tries to square the circle with privatization schemes.

But whatever doubts and regrets exist, present reality cannot be denied. The DES, the UGC and the universities must come to terms with the new relationship that exists between them. To pretend that no serious modification has occurred or that it is possible to reestablish the old relationship is to do

a disservice to the universities. We must accept that the UGC has become a different animal and act accordingly. The present is a good time for such a reevaluation. The departure of Sir Edward Parkes to the interregnum that these moves have created offer a suitable opportunity for established positions and practices to be re-examined. The difficult job of rearranging university provision to match the contraction in resources, which has consumed more than 100 per cent of the UGC's energy and attention since the winter of 1980, is now three quarters complete. So the committee has a breathing space. The result of the general election with the certain prospect of five years of Conservative Government and the probable prospect of 10 means that present policies will continue. There is to be no miraculous rescue. So there is a solid political context in which the necessary reevaluation of the UGC's role can take place.

This reevaluation must have two strands. First, the UGC must accept that it long ago ceased to be clubbable and has become a bureaucracy. So it must learn to keep to the rules that govern bureaucratic behaviour. This means a larger and perhaps more professional staff and more formal and open procedures. The traditional informality and confidentiality of the committee may once have been its strength, but it has become a liability. The UGC has been formally understated and wilfully misunderstood the number of its staff has been cut, the rank of its secretary downgraded, and the separation of the UGC from the DES which would have protected it from the recruitment of staff from the universities themselves abandoned. The absence of formal procedures and the absence of the committee have become obstacles to effective management and policy making. It is difficult to build a new system, and greater legitimacy on the traditional principle of "informed prejudice".

Second, the UGC should more positively embrace its new and perhaps inevitable role as a national university agency rather than instinctively trying to pretend that its decisions do not matter very much. In other words the UGC should not be afraid to exercise leadership, which it will be better equipped to do if it has first set its own house in order and abandoned administrative amateurism. Sir Edward had already begun with considerable courage to exercise leadership, but he was

perhaps too cautious in his approach to the modernization of the UGC as a bureaucratic instrument. Sir Peter should push hard on both fronts whatever open opposition he may encounter in the universities and covert opposition in Whitehall.

Perhaps the National Advisory Body on the other side of the binary line was uncautious in its initial enthusiasm for more two-year courses. But it set off an interesting debate now taken up by Leverhulme, and was an exercise of positive leadership that the UGC should be strengthened will be controversial. But there is no future in its being a weak buffer, with the universities snapping and snarling in frustration at their independence drains away to the centre but without the resources to do more than try desperately to keep in touch with the shifting winds of political fancy in the DES. It should not be the role of the UGC simply to second-guess the intentions of Sir Keith or his successors, especially as with fantasies about privatization these intentions may reflect a refusal to accept the existence of a national university system that is at least as unrealistic as the grumbles of those in the universities about the growing dirigisme of the UGC.

The UGC needs the self-confidence and the resources, the former of which implies the acquiescence of the universities and the latter the support of Whitehall, to be able to take the lead in the modernization of the universities. It has half begun to do this under Edward Parkes; it must be completed under Peter Swinnerton-Dyer. A strong UGC can develop stronger, sophisticated, and positive policies for the universities which even the Government will find it difficult to overturn. It can at least ensure that we have a policy for universities not a public expenditure policy that just happens to knock universities flat.

A weak UGC, the legitimacy of which is constantly questioned by the universities and the competence of which is undermined by Whitehall's reluctance to give it adequate resources (and perhaps by its own reluctance to employ them in a thoroughly professional administrative way), cannot continue to serve as a buffer between Government and the universities. Instead it is an open drawbridge over which the most prejudiced and undisciplined intentions of politicians can charge straight into the heart of the universities. So, unless we are prepared to accept outright state control of the universities or to risk the dangers of uncontrolled privatization, neither the UGC nor any realistic agenda, a stronger UGC is in the interests of the universities even if it may take some time to convince them of where their true interests lie.

Planning teacher education

It was surely only a matter of time before a National Advisory Body inside a bid for involvement at the highest level in teacher education policy. Last year's cuts in training places showed all too clearly the nonsense of allowing the NAB no real voice in a large part of the system which it is expected to plan. And like late intervention in that exercise suggested that the body could be a force for moderation and common sense in an area where there is considerable scope for improvement in forward planning. Inevitably, those cuts have prompted some decisions which belong in the NAB planning exercise, which will determine the distribution of the vast majority of places in the public sector. The withdrawal of teacher education from the City of Liverpool College of Higher Education, for example, effectively dictated its future as an institution in the University Grants Com-

mission, which receives its allocation from the Secretary of State after advice from the ACSET, but is then left to determine institutional allocations. There are those on the ACSET who would be happy to see such a change in order to concentrate on the qualitative aspects of their remit.

The issue will not be an entirely straightforward one for Mr Peter Swinnerton-Dyer, however. Even if he and his local authority colleagues accept the main thrust of the Board's recommendations, that the NAB can no longer stand aside from teacher education, they may be less enthusiastic about delving into the development of teacher training within the sector generally. Such questions are more properly the preserve of the ACSET, and too wide terms of reference for the NAB's working group might be misinterpreted as empire building.

Such an arrangement would be more than a reflection of the power

Laurie Taylor



MUMMY. MUMMY. MUMMY. What is it, my darling. Daddy's coming to see you Mummy. And he's so funny. In one of his sort of states.

What's the matter with him? You know, Mummy. He's all 'cited. Like he gets. Roger. There you are. What on earth's the matter? You've quite frightened Emily. Tell me at once. Not more trouble with the guttering?

No, not that. Not that. You haven't locked the car keys in the boot again? No, no. Not the keys. They've not sent the Telegraph instead of The Guardian? No, no, no.

What then, my love. You're so red in the face - positively glowing. Darling. So short of breath. Your chest's heaving. Darling.

Yes. What is it? Speak to me. I've done it. I've done it. Done what? Done what? Done it. You know it. What. Broken the... broken the...

Yes. Yes. Broken the all-time record. You mean?

That's right. Less than... Absolutely. Less than fifteen minutes.

By how much? By a whole one tenth of a second. Fourteen minutes, fifty nine seconds and nine tenths.

Amazing. I know. I know. And you've been so pessimistic this season.

That's right. Felt you were past your best. Quite. That the future was all downhill. Defeat stared me in the face. But now.

Back on target. My love. You felt the burn? Oh yes. That moment when I sensed it wasn't within the bounds of human possibility. That I simply couldn't go on.

And you hit the wall of pain? Oh yes. Coming down the back straight. Terrible. Why was I doing it? Wasn't there any other meaning to life?

But you went on? There was no other way. It had to be done.

My love. My very own victory lap. But now: back to the starting blocks. This is only the beginning. Farewell my hero.

Mummy. Mummy. Mummy. Yes, my little one. Mummy. Mummy. Why does Daddy have to make so much fuss about things?

Well, I don't think that's quite fair, darling. After all, it's not every day of the week that he breaks his own record for marking a complete examination script.

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Secret meetings held on East London United

by Ngalo Crequer and Karen Gold

Plans to form an East London polytechnic from five separate institutions have been discussed at secret meetings attended by vice chancellors and top level representatives of the University Grants Committee and the National Advisory Body.

Meetings at officer level are continuing to consider in more detail the potential united future for City University, two London University colleges - Queen Mary College and Goldsmiths - Thames Polytechnic and Avery Hill College.

But the initial meetings to discuss the largest polytechnic proposal so far were at the highest level and included London University vice-chancellor Professor Randolph Quirk, the host, and City University's Dr Raoul Pothol.

With them were the Inner London Education Authority's two most senior officers in further and higher education: Mr William Stubbs, and Mr Philip Hunter. Mr Neil Fletcher, the chairman of the Further and Higher Education subcommittee of the ILEA which controls Thames Polytechnic and Avery Hill was also present.

Mr Christopher Ball, chairman of NAB and Professor Keith Clayton, vice-chancellor of the UGC also attended at least one meeting of the two which have taken place.

The idea of a single higher education institution for East London spanning the Thames was first raised by Dr George Brosnan, the former director of north East London Polytechnic, in proposals put to the Commons Select Committee on Education in 1980. The area formed the model for a suggested new system of organization for higher education nationally.

The outcome of the talks has to be set within the context of the large scale consultation exercise currently being carried out by ILEA.

A number of possible mergers and structural changes are being discussed in the first review of advanced further education nationally.

Meanwhile the Goldsmiths and QMC talks went further this week. The two colleges were considering a proposal to establish a collaborative planning committee to review the physical, financial and administrative question to determine what form of long-term association would be best.

What seems likely to emerge, according to the talks so far, is overlapping institutions, with complete unity at the centre and complete independence at the periphery. So QMC's medicine and Goldsmiths' dance and art and craft would remain outside the merged institution.

Goldsmiths' staff would be given university titles but financial provision would remain as at present, with Goldsmiths' DES-funded, and QMC university-funded.

The premiers will be asked to set up a Commonwealth higher education programme, approved in principle at their last meeting in Melbourne. It would build on existing initiatives, such

education in London for ten years. Interested bodies have already responded to the first stage of the review and it is expected that the ILEA will be making its proposals in September which will go out for consultation with reply by January.

There are three strands to the talks: discussion between the parties as to desirability and feasibility of a single institution, a rethink about the polytechnic and advanced further education distribution around London; and within the university only, the best solution for Goldsmiths' and Queen Mary College. Underlying the discussions are anxieties about what happens to the polytechnics and colleges if the Government reforms ILEA and disbands the Greater London Council.

But the talks show a marked willingness to look for solutions that cross the binary lines. There are now a couple of examples, the Ulster merger between the university and the polytechnic, and the discussions between Aberdeen University and the Robert Gordon's Institute of Technology.

The UGC has been watching these developments with interest although they do not have a specific policy to encourage or discourage. The NAB is also keeping a watching brief.

City University already has close links with QMC, cooperating at the departmental level, and is still considering the ILEA document on rationalization. City would rather link up with QMC than with City of London Polytechnic.

But doubt has been expressed at the talks about the desirability of a single institution, because it would be too big and unwieldy. Attention has shifted therefore to smaller linkings within the groups.

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Aston faces compulsory redundancies

Aston University's council has been asked to consider implementing compulsory redundancies in departments where academic numbers exceed the agreed staffing range.

The executive of the Aston senate, a small group chaired by Professor Frederick Crawford, the vice-chancellor, has recommended "voluntary severance", which the council will consider on July 12.

This will be only days after the High Court will determine, on July 5, whether Aston has the power under its charter to dismiss academic staff compulsorily. Aston's tenure clause is one of the strongest in the universities.

The move is being made despite the fact that by August next year nearly 200 academic staff will have left Aston voluntarily, a number which exceeds the total first demand.

In 1981 there were 522 academic staff on continuing contracts. By August 1983 there will be 376, and by August 1984 it will be down to 326.

If the council accepts the motion it will affect 21 staff in nine departments. Mr Peter Tebbitt, the university staff officer said this week: "We are quite close to getting the financial balance of the university, as far as staffing costs are concerned, right. But what was in the mind of the executive was the academic imbalance and the very serious problems that will remain because of the rank and age of the people."

The idea for the meeting arose after the SERC's council met at CERN last year. Engineers on the council, including the chairman of the engineering board Mr Dermot Downs, were impressed with the quality of the engineering demanded of big science

'New blood' arts boost

by Paul Flather

There will be more "new blood" posts in social science and the humanities next year after considerable pressure from the universities, the British Academy, and the Social Science Research Council.

The University Grants Committee will not formally tally the details and distribution of this year's "new blood" scheme until its meeting next month, but it has been accepted that this year's allocation of 32 arts posts are disproportionately small.

It is thought that 24 posts each could be given to the humanities and the social sciences, although there is pressure for even more. Altogether some 300 "new blood" and 30 information technology posts will be on offer for 1984.

Details of the new scheme were discussed at a meeting between the UGC and the five research councils last week. The universities have been

pressing for more guidance on procedures, particularly on putting in bids.

The British Academy has been particularly anxious to increase the humanities allocation; just 15 this year, and has put its case forcefully to the UGC.

Professor Owen Chadwick, president of the British Academy, said last week: "The humanities and the arts were very much an afterthought."

The Committee of Vice Chancellors and Principals has pressed the case for more arts posts. They want to know how many applications are required and in what broad disciplines. Universities spent a great deal of time prioritising bids, but their advice appeared to have been largely ignored.

The CVCP has also expressed fears that the new blood schemes should not be seen as a model for longer term funding, particularly as the money is earmarked. They are worried about distortions which can result from centralized direction.

Engineering boost page 4

University engineers and colleagues in particle physics and astronomy, who usually compete for limited research cash, may soon be collaborating on "big science" projects.

Members of the Science and Engineering Research Council's engineering, nuclear physics and astronomy, space and radio boards will meet next Monday to explore the scope for British engineers to work in pure research institutions like CERN, the European nuclear research centre in Geneva.

The idea for the meeting arose after the SERC's council met at CERN last year. Engineers on the council, including the chairman of the engineering board Mr Dermot Downs, were impressed with the quality of the engineering demanded of big science

researchers were to build ever more ambitious machines.

At the moment, most of the engineering work at projects like CERN is carried out by specialist contractors, but the SERC engineers felt that university engineering departments could play a larger part than they do now in this work.

"It seemed to me that just as physicists from British universities go out to CERN, so could university engineers", Mr Downs said they would go not as contractors, but as researchers, for postgraduate training, to profit from the work at the frontiers of engineering knowledge which CERN depended on. The same could apply to the SERC's space science and astronomy projects, he believed.

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Engineering boost page 4

AUT opposes cash move

Edinburgh University's Association of Teachers has attacked a confidential document revealed in the THES last week suggesting methods of fund raising to support academic innovation.

Dr Adrian Graves, secretary of the local branch, said the association did not oppose raising money from outside sources.

"But the AUT is very concerned about any university proceedings which had academic ramifications taking place in secret. This committee has set academic objectives for the university without there being wide consultation and debate on these objectives."

The body set up to discuss the creation of academic posts was the senate, said Dr Graves, but the university court, which has already approved the report in principle, had by stealth denied the senate a chance to debate matters of the greatest academic concern.

Dr Graves said the AUT was also worried by references in the document to raising money from commercial interests. "One of the great values of British higher education is that it is independent of commercial concerns, and we have to guard against this being eroded."

But a university spokesman said: "No one is proposing a huge injection of commercial finance and influence, but augmenting the university income by two or three per cent. The university is hardly likely to concede undue commercial influence on this basis any more than it concedes undue governmental influence on the basis of a much larger cash injection."

There was no question of any measures being passed by stealth, he added.

Legal advice

Students at Goldsmiths College, London, are taking legal advice after learning that Dr Richard Hoggart, the college warden, had stopped payments of the student union grant allocation because of an alleged rent strike.

Mr Spas, Freese, the student union president, said that a £10,000 charge for club and society activities had been stopped without proper warning and the union now faced severe financial difficulties.

The move is apparently in retaliation for outstanding hall fees, which Dr Hoggart estimated to total £26,000. But Mr Freese denied that any students were deliberately withholding their rent and that the union had run any organized rent strike. Dr Hoggart refused to discuss what he says is a purely internal matter.

Jobs shareout

Sir Keith Joseph, Secretary of State for Education and Science, is to take over personal responsibility for information technology and educational research as well as the 16-19 age group, it was announced this week. His new responsibilities with the Manpower Services Commission, returning a partnership with his former political advisor, Mr David Young, director of the MSO.

The move is the result of sharing out the former responsibilities of Mr William Shelton, who was not replaced when he lost his place in the Government last week. Mr Peter Brooke takes on adult education and science as well as higher education, while Mr Robert Dunn is responsible for teacher training in addition to schools.

Initial welcome

Kelke College has given an initial welcome to the Dover committee's proposals to reform the Oxford University undergraduate entrance procedures, including the abolition of a seventh term written examination. It was Kelke which really forced the university into setting up a formal admissions review committee last December when the college threatened to open a third of its places to direct entry students.

Career prospect

Improving management careers for women in the hotel and catering industry is an Ulster Polytechnic project awarded £160,000 by the Manpower Services Commission.

Much of the money will go on a new course starting this September.

New fund for industry links

by John Turney
Science Correspondent

The Department of Trade and Industry is likely to approve a new fund for initiatives designed to improve academic-industrial technology collaboration before the parliamentary recess in July.

The terms of the new fund, which will back proposals for schemes like science parks and industrial liaison appointments, are very similar to plans expected to come from an Advisory Council for Applied Research and Development report on the same subject, expected to be published next week.

The Government is so enthusiastic about exploiting academic enterprise, that the former industry secretary Mr Patrick Jenkin asked officials to draw up plans for the fund even though the Cabinet Office had already asked the ACARD to set up a working group on links between industry and higher education.

Mr Jenkin said after this year's

budget that he wanted the British Technology Group to play a more active role in commercial development of academic ideas, and the department wanted to encourage science parks and similar ventures.

Since then DoI civil servants have consulted more than 30 universities and polytechnics to find the best models for successful work with industry. Their report is now being finalized for Mr Jenkin's successor in the reconstituted Department of Trade and Industry, Mr Cecil Parkinson. Like the ACARD group, the DoI investigation concludes that there is no one best way for all higher education institutions to exploit industrial opportunities. Both reports suggest that one solution for Government help is a fund open to applications from universities or polytechnics which have specific proposals.

The Department of Trade and Industry has not yet put a value on the fund, but the ACARD group suggests that £5m would be enough to start off

a flexible scheme for backing such initiatives.

The proposals are also likely to have the backing of Mr Kenneth Baker, who remains as Minister for Information Technology in the new department and is keen to see money found for science parks in particular.

The new fund may go ahead before final clarification of the British Technology Group's role. The DTI still intends to enhance the ability of the former National Research Development Corporation to promote commercial use of academic inventions.

But the union of NRDC with the National Enterprise Board in the BTG has still to be formalized, and the DTI and the Treasury are still discussing proposals to remove the group's automatic right to first refusal of inventions based on publicly-funded research.

The group's final status will also depend to some extent on the ACARD report, which is expected to produce a neutral verdict on the BTG's record.

'Blunder' angers colleges

by Patricia Santinelli

Teacher training colleges are angry that the Department of Education and Science's failure to inform them that plans to control the study of "second" subjects have been abandoned.

The first news of a DES change of policy reached institutions when they received questionnaires from the Advisory Committee on the Study and Education of Teachers asking them to list all their main subjects and second subjects for next year, with limitations on the latter category.

Since then the department has informed privately to a number of institutions that they are allowed "second subjects" which are not already in their main allocated list.

Normally institutions would have welcomed this about face. But at a stage many have already trained both staff and resources - which can be recalled - in order to adhere to DES instructions circulated last autumn.

This advised institutions that they would not be allowed to offer any subsidiary subjects which were already on their main subject list. The DES aimed to prevent prospective teachers from teaching a subject in which they had not been adequately prepared.

In fact, the instruction meant that institutions which had been allowed only four subjects, say maths, English, physical education and history, were unable to provide students with additional training corresponding to the previous degree or studies - a fact the DES insists on.

It is believed that the department's failure to inform institutions of a request to the ACSET to collect information is because of its embarrassment at having to admit that a "second subject" is virtually impossible. Many institutions had wanted to achieve uniformly and would not work.

In April the DES withdrew a circular which showed a partial reversal of previous policy. The DES's emphasis on main subject specialization remained, but had now become clear that short-term secondary schools meant that teachers would have to take classes in second subsidiary subjects.

The court case involving the threatened Catholic De La Salle College in Manchester, due to be heard this week, has been postponed until next month.

The Department of Education and Science postponed the case, which is fast turning into a mini-saga, because of prior commitments which will spill over into this week.

The case is being brought against the DES by the Catholic Education Council which opposes the closure of De La Salle. It is on the grounds that it will undermine the historic Catholic status of teacher training places agreed with the end of the century.

The postponement has given the college's action campaign hope that the DES is conducting a serious analysis of its figures. Mr William Waldegrave, the former under-secretary for higher education, had already admitted that these were wrong.

Overseas fees

continued from front page rate contributions, concessions for students in foreign travel and greater international coordination to ease the impact of policy changes. However, they also recognized the need for government policies on foreign students to leave some flexibility to other agencies to become involved.

The first meeting between university rectors from seven states, launched a work programme also aimed at stimulating mobility, as well as encouraging changes of staff, researchers and students within Europe.

Professor Carl Wendel, the Dutch chair of the liaison committee of university rectors, said that university rectors in the EEC were facing their most severe problems since the community was established. Close and effective cooperation was required to solve them.

Teaching watchdog proposed

by Patricia Santinelli

Proposals for a single national accreditation body for education courses to be directly responsible to the Secretary of State for Education were being debated today by a committee of the Government's Advisory Body for Teacher Training.

The proposals which are to go to the main committee of the Advisory Committee for the Supply and Education of Teachers next month have the support of its chairman, Sir Clifford Butler. If approved it will mark a further step in the control Sir Keith Joseph is intent on gaining over teacher training courses.

According to a paper prepared for the committee, a single body is necessary rather than the several local or regional professional committees originally considered, to ensure that the new criteria spelled out in the White Paper *Teaching Quality* is applied consistently across all training courses in universities and colleges.



Sir Patrick Nairne, the new chancellor of Essex University, tests an anti-noise system on a visit to the campus to meet staff and students, watched by Professor Barrie Chaplin, of the Wolfson Centre for the Electrical Cancellation of Noise and Vibration.

Study shows computing 'errors'

by Felicity Jones

A lack of clarity about the needs and wants of students in adult classes in computing has been highlighted by a study in the University of Leeds department of adult education.

The Leeds research and development study of local authority provision for adults with an interest in personal computing focused on introductory computing evening classes of which there were 11 listed in Leeds for 1981 and 22 in 1982.

The occupational and education background of the students differed widely but the survey showed that administrators are showing a growing interest in the area and the implications of computer technology which might suggest a need for the provision of courses for them.

As was to be expected, there was a rise in both the number of actual computer owners and potential purchasers over the two year survey period. In 1981, 16 per cent were computer owners with a total of seven different types of computer in operation while by 1982 ownership was up to 30 per cent with 12 different types of machine.

The percentage of non-owners who were considering purchase has also risen, except among teachers who probably have greater access to machines during school time.

The most striking result of the survey, carried out by research student David Banks, who has written a report for the latest issue of the National Institute of Adult Education's journal *Adult Education*, however, is that the types of students are fluid and vary and lack clarity about what they expect from such courses which in turn affects the courses themselves.

It is suggested that one answer may be to treat introductory computer classes as places where students can become acquainted with a whole range of issues so that they can then focus their attention later on particular relevant areas of interest to them.

Mr Banks thinks it may be too simple a matter for the adult education system to provide large numbers of introductory computing classes, concentrating on programming in BASIC, which may do a disservice to the students since it does not meet the wants and needs of those students.

CVCP appoints new secretary general

Mr Brian Taylor, executive secretary of the Committee of Vice Chancellors and Principals, has been appointed secretary general, to succeed Mr Geoffrey Caston in October.

Mr Taylor is a graduate of the London School of Economics, who began his career in university administration as personal assistant to the principal at London. He became executive secretary of the CVCP in 1973. He has close links with universities in Europe and the Commonwealth.

Hull gets go-ahead

The Visitor of Hull University has ruled that the university is empowered to levy an amenities fee, and that it has lawfully exercised that power.

The university had introduced an amenities fee of £21 a year to contribute towards the careers service, the sports centre and health and counselling services. Last year students objected and the fee was suspended. Following the ruling it has been reintroduced.

Postgraduate rise

Postgraduate student grants are to go up by 4 per cent. Grants for London students increase from £2,880 to £2,995, for students outside London it goes from £2,335 to £2,430, and students living at home get an increase from £1,705 to £1,775.

Entry required

The *Compendium of University Entrance Requirements for First Degree Courses 1984/85*, published this week by the Committee of Vice Chancellors and Principals, details all general and special requirements for university entrance, plus a description of institutions and a list of subjects to choose at school.

Originally they wanted to set up a centre of Jewish studies with a guaranteed budget of at least £40,000 a year.

Labour vote to take back control of poly

by Karen Gold

Liverpool's education committee has voted to take control of the polytechnic back from the governors, to whom it was delegated last year, as the first step in an expansionary plan for advanced further education in the city.

Power was delegated to the governors last March after the hung city council failed to agree on a policy for the polytechnic. The decision by the newly-elected Labour majority will go to the full meeting of the city council next week.

If agreed, it will mean that all major decisions by the governors will have to be ratified by the education committee and city council. Achieving that control is one of three aims of the new administration going for approval to the council meeting.

The second is to replace the eight political governors on the polytechnic's 36-strong governing body, since they reflect the hung council, with eight members from the Labour group. The new governing body is likely to meet early next month.

The decision to fill all eight places was "to try to give some direction and leadership to the polytechnic" according to Liverpool's education chairman Councillor Dominic Brady. That is also

the aim of the third resolution.

According to Mr Brady, the motion requests the governing body "to make efforts to reduce the deficit in advanced further education, but not to reduce the number of jobs, close courses or introduce any private contractors into the authority".

The education committee is meeting every week to formulate a plan for the polytechnic, which will concentrate on increasing full-time student numbers and courses to improve cost-effectiveness, Mr Brady said.

Those discussions would become an academic plan, if the polytechnic did not produce one itself by the end of the summer. "The principle we are putting forward is that we will run courses where there is proven student demand," he said.

"There is proved demand in most of the courses at the polytechnic: most are two or three times oversubscribed. We have got to investigate what is possible and practical, but there is demand in Liverpool for expansion by at least 50 per cent."

"The principle we are putting forward is courses to take account of the need of Liverpool and Merseyside: we won't just put more science-based courses on, but will look at courses on their merits."

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Merger grant sparks row

by Ngaio Crequer

Royal Holloway College, which is merging with Bedford on the RHC site, has complained that Bedford has been given a much bigger grant by the court of London University.

Members of the RHC academic board feel that, as the host institution in the merger, their costs are greater and this should be recognized by the court, or there should at least be parity of treatment.

In the recurrent grant allocation, RHC has been given £4,264,000 a 2.3 per cent increase on the 1982-83 figures. Bedford has been given £1,867,000, a 4.3 per cent increase. Further, in the research allocation Bedford's has gone up by £37,716 and RHC's has gone down by £21,345.

Both colleges have told court that the merger has impeded their attempts to attract research support. Court has said: "The court has received representation from Bedford and RHC that preoccupations of their academic staff with the merger has limited their ability to attract research support."

"The court is still considering these representations, albeit sympathetically and may provide one or both of the colleges with temporary compensatory grants from their restructuring funds but it cannot see its way to excluding the two academics."

Dr Ray Miller, the RHC principal has taken up the case with Mr Hamish Stewart, the university principal. Dr Miller said: "The court allocation is one of these delicate matters so it is very difficult to tell whether a particular allocation is fair or not."

"It is a fact that RHC got a rather smaller percentage increase in pound terms than most of the other colleges. It is something we are discussing with court, whether there has been a mistake."

Engineering body overhauls support

by Jon Turney
Science Correspondent

The Science and Engineering Research Council is conducting a major review of its support for engineering research. The Needs of Engineering Working Party, which will report to the council's engineering board early next year, will consider whether the requirements of engineering differ from those of science.

Engineering has accounted for a growing share of the council's budget since the former Science Research Council was renamed to incorporate engineering in its title in 1980. The new working group is partly a response to criticisms, notably from the engineering professors' conference, that money for engineering research tends to go to projects nearer to basic science than engineering development.

The engineering professors argued strongly to this year's House of Lords Select Committee investigating engineering research and development that engineering should move from the SERC to a new Engineering Research and Development Council.

Although it rejected this proposal, the Lords committee supported the view that the SERC should spend more money on engineering, especially on development. The engineering professors, who are represented on the new working group, will now be able to re-

new their pressure for recognition that "engineers are not clones of scientists", as one senior member said this week.

Mr Dermot Downs, chairman of the SERC engineering board, said the new group would examine the role of engineering research and postgraduate training in the universities, and see what changes were needed in the SERC support to meet the special needs of engineering professors in this process might bring them to revise their criticisms of the council.

Professor Geoffrey Sims, vice-chancellor of Sheffield University and chairman of the SERC working party, said there was still a basic question of

exactly how the needs of engineering differed from science. The group would "try to identify areas where engineering research and development is not being supported adequately by existing machinery, and try and see where there are areas where the SERC could be playing a different part."

He expected that responses to the group's call for evidence would include comments on projects with too little support for design studies and on the development side. "Personally, I think more could have been done in these areas", he said, and the group's report would try and offer clear directions on how this could be done in future.

A revised "retrenchment plan" involving bids from faculties for the posts to be filled and proposing a major planning review in 1985, was endorsed last week by the university congregation, the dons' parliament.

Oxford has also just set up a new appeals and income generation committee under the chairmanship of Mr Christopher Ball, warden of Keble College, to identify fund-raising projects and priorities.

The revival in university finances comes from three sources: a recovery in overseas students fees income since 1981 over an expected £12m deficit last year; a £473,000 increase in the recurrent grant as Government cash-limits were relaxed; and another grant increase expected in 1983/84, partly because of 80 extra science student places allocated to Oxford.

The general board has already told spending departments to expect no further cuts in either 1983/84 or 1984/85, although it is remaining cautious about completely abandoning its 1981 retrenchment plan. This required an eight per cent budget cut by 1984-85; so far 2 per cent was cut in 1981/82, and two and a half per cent in 1982/83.

But the board has now given faculties until the end of term to submit bids, in order of priority, for the frozen posts which should now be refilled. It hopes to begin the process early next term, and has set aside some special funds for the purpose.

The board has also made it clear that

Report slams ethnic training lack

by Patricia Santinelli

No courses exist for graduates or undergraduates wishing to train as teachers in ethnic minority community languages, according to an in-depth report prepared for the Swann Committee.

The report based on a survey of well over 118 teacher training institutions was produced by Professor Maurice Craft and Dr Madeleine Atkins of the School of Education at Nottingham University.

"Nowhere in England and Wales can a graduate in ethnic minority languages such as Turkish, Greek, Chinese, Arabic, Portuguese or any Asian language obtain an appropriate training for teaching. And only a tiny minority of PGCE courses offer the opportunity of studying a few modern languages with no previous knowledge," the report says.

The report adds that the BEEd situation is even weaker and is bound to deteriorate as the degree becomes a predominantly primary teaching qualification and the outlook is therefore unpromising.

"Very little modern language work is taking place and 75 per cent of all such students are studying French as an academic subject, with a small number studying Welsh and a sprinkling doing German" the report points out.

However, the report emphasizes that although almost all institutions had access to languages centres offering self instruction facilities or other arrangements for the acquisition or improvement of community or modern languages, in most cases these offered modern European languages only and only three provided opportunities in Asian languages.

A further finding was that in terms of relevant language provision across the curriculum, university departments of education were uniformly poorer, polytechnics uniformly better and colleges between the two.

In fact an additional survey of undergraduate courses in modern and community languages in both universities and public sector institutions shows that French and German predominate with between only 10 and 19 institutions in both sectors offering some ethnic minority languages.

The authors recommend the setting up by the Department of Education and Science of a small national working party to develop a coordinated policy in this field. In turn this body should designate several specialist centres as a matter of the highest priority. They survey indicated that only about eight institutions had sufficient expertise to allow for immediate further development.

The report also urges that provision in ethnic minority languages be offered some protection in the forthcoming National Advisory Body review of higher education in the public sector.

It also wants the DES and the University Grants Committee to consider a somewhat extended quota for PGCE modern language specialists because of the emphasis in secondary training at this level. It suggests this could be done by designating "community languages" as a new category.

Moreover, it recommends that those BEEd courses in institutions already active in this field should be permitted to develop secondary programmes in community languages.

Oxford to refill 50 vacant posts

by Paul Flather

Oxford University is planning to refill between 50 and 60 academic posts - equivalent to about the current number of "suspended posts" - because of recent improvements in its financial outlook.

A revised "retrenchment plan" involving bids from faculties for the posts to be filled and proposing a major planning review in 1985, was endorsed last week by the university congregation, the dons' parliament.

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The board has also made it clear that

New minister tackles old tasks

by Olga Wojtas
Scottish Correspondent

The new Scottish Office minister for education and industry, Mr Allan Stewart, will enjoy a very brief settling-in period before tackling a number of higher educational issues bequeathed by the former Scottish education minister, Mr Alex Fletcher.

A decision is urgently needed on next session's intake to community education courses. The Scottish Education Department has recommended that the number of students should be axed from 190 to 120. However, the principals of the Scottish colleges of education have criticized the proposals, claiming that there is a considerable need for community education graduates, and that they are successful in finding jobs.

The governors of Paisley College are seeking a meeting as soon as possible with Mr Stewart to ask him to suspend the decision to axe the college's social science and applied social studies degree until there has been a national review of the subjects.

If the decision is to be rescinded, it must be done quickly since the SED has already told the college to slash next session's intake from 140 to 70.

The UGC congratulated Oxford on the "impressive" development of the external studies department and the achievements in science research where it was now prominent in areas such as ceramics and robotics. On the arts side it called for more inter-university collaboration, and recognized some subjects were vulnerable. It believed it was better to "do fewer things well than to spread the jam too thinly".

The UGC was concerned about charges to students for inter-library loans, limited student counselling, the need for more collaboration between colleges in the freezing of posts and for better public relations to improve the university's image among local people.



Mr Stewart: down to work and suspended the appointment of a new head of the social studies department.

The minister must also make a ruling on the individual intakes to the seven education colleges for next session.

Mr Stewart will be lobbied on a number of other issues by various factions, particularly on the implementation of the Scottish Tertiary Council report. It is likely that the minister will favour the majority report, recommending that advanced further education should be centrally run by the local authorities, but there will be strong pressure on him to back the minority report, proposing that all tertiary education should be run by the regions.

A working party set up by the secretary of state for Scotland will produce guidelines by the end of this month for the introduction of a primary degree, giving Scotland an all graduate teaching profession, and it will be up to Mr Stewart to decide whether to implement their proposals.

The Scottish National Union of Students is to urge Mr Stewart to reject any plans to implement a flat rate of travel awards, which it claims would cut the grants of more than 11,000 Scottish students.

And Mr Stewart will also have to consider the proposal by Aberdeen university court that a committee be set up to examine the feasibility of a merger between the university, Robert Gordon's Institute of Technology, and Aberdeen College of Education.

More public school-leavers head for university

The majority of pupils leaving public schools in 1982 opted for higher education courses with a decreasing number going straight into employment, according to a survey of 200 schools published this week.

The Independent Schools Careers Organization survey published in the *ISC Summer Bulletin* shows that out of 2,400 girls 85 per cent were going on to university and other degree and full time courses and only 4 per cent were going straight to work.

For the boys the proportion was slightly lower. Out of 8,600 75 per cent opted for university and other degree and full time courses and 11.4 per cent went straight into employment.

Among the girls, there was a slight increase in those taking other full time courses such as higher diplomas and a minor decrease in the number going to university.

Languages, science (particularly biology), secretarial studies, economics and business studies attracted the largest number of girls with proportions ranging from 8 to 3 per cent. The lowest categories were engineering, maths, agriculture, accountancy, banking and classics with proportions ranging from 1.7 to 1 per cent.

The proportion of boys going to university fell very slightly from 54.5 per cent in 1981 to 52.2 per cent in 1982, but there was a slight increase in those taking other degree and full time courses, mainly at polytechnics.

Engineering proved to be the most popular category with just under 13 per cent opting for courses in this field. The second most popular choices were for economics, business studies attracting nearly 10 per cent and science 7.52 per cent.

The survey also had some surprises with art, commercial art, industrial design and photography.

Engineers project brand new image

Heriot-Watt University has launched a project to provide high technology video courses to British industry. Video Course Services, set up jointly by Heriot-Watt and the Engineering Industry Training Board, has been awarded a £40,000 grant by the Department of Industry.

It will draw mainly on video courses from more than 20 engineering universities in the United States. So far, very little material has been produced in the United Kingdom, but the project hopes to help to develop courses.

An advisory board of representatives from industrial companies and other interested organizations, including the Department of Industry, will suggest which course material should be made available.

APT warn on research cash

Allocating research money to polytechnics and colleges from the advanced further education pool would be damaging and dangerous, according to the Association of Polytechnic Teachers.

In its response to the National Advisory discussion document suggesting such an arrangement, the APT says public sector higher education needs adequate funding for scholarship and research on a par with universities and administered through a realistic unit of resource.

The NAB document based its arguments on an unrealistic assessment of research as currently organised in both universities and the public sector, and failed to mention scholarship at all, it says.

All types of research defines in the NAB document - research, up-dating and consultancy - as well as scholarship, are interdependent says the APT, and without a basis of scholarship among all staff and resources for it, the public sector cannot compete with universities for external funding and good postgraduate students, nor sustain its standard of teaching.

The APT compliments NAB on recognizing the function of research in the public sector in maintaining comparable standards with universities. But it says that if part of the pool is allocated to research rather than scholarship, the effect will be to encourage staff away from teaching, and to create two classes of lecturer: some concentrating on teaching and others on research.

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Women's studies pack is result of joint venture

A cooperative venture between the National Extension College and the Workers' Educational Association, with the financial backing of the Equal Opportunities Commission, has produced a resource pack for tutors in women's studies.

The initiative for the pack came from the Berkshire, Buckinghamshire and Oxfordshire district of the WEA. Part-time tutors and volunteers decided to pool their experience and share their teaching resources and reading lists for general use by other would-be tutors around the country.

The editor of the resource pack, journalist Angela Spindler-Brown said that the material included was deliberately wide-ranging so that students in individual women's studies classes could choose what they wanted to study.

The resource pack is made up of seven individual clearly laid out sections on different topics such as women and work, education and child-bearing and child rearing. Each section carries four syllabuses which have actually been used by tutors and a list of useful addresses, suggested reading and discussion materials.

Word-diagrams are used in each section to demonstrate visually the sorts of issues and problems which can be covered under each topic. The final section of the pack includes a practical guide to setting up a creche.

The number of women's studies courses have certainly been increasing in recent years and the wide variation in content is reflected in this resource

Counting on each other

Polytechnic lecturers have founded their own society of statistics to examine common issues including a deteriorating student staff ratio, the impact of information technology and new software advances in their discipline.

An inaugural meeting at North London Polytechnic last week was attended by statistics lecturers from 27 polytechnics, although representatives from all 30 polytechnics have already expressed support for the initiative.

There are about 270 statistics teachers in the polytechnics, and a number including Sheffield and Coventry (Lanchester) have independent statistics departments, although statistics is more often linked to mathematics and computing in one department.

The new society, yet to be officially named, will be mainly concerned with issues relating to the teaching of statistics to undergraduate students.

Top priority for the society will be to press for statistics to be given a higher student staff ratio. Statistics, mathematics, and computing were all shifted from group one to group two of polytechnic subjects, increasing their SSR from 9:1 to 11:1.

The steering committee has also been asked to look at the role of statistics in the Business and Technician Education Council course syllabi, teacher assessment in the age of the microcomputer, reforms being discussed by the National Advisory Body on public sector education, representation of statistics on Council for National Academic Awards subject panels, and the use of unified computing software.

of people working in the libraries. But Mr John Grogan, retiring president of OUSA, told congregation said the wording of the NUS-CVCP agreement precluded the exclusion of students from discussions of general staffing matters.

Both Nalgo and ASTMS have consulted their members and national headquarters and had raised no objections to a student presence, he said. The amended decree was approved by 712 to 297 in the ballot.

Academics veto student presence at 'reserved business'

Oxford University students have failed to win the right to sit in on discussions of staff salaries and conditions.

In a postal ballot the university's academics have voted overwhelmingly to declare the issues reserved business - when the two students who have secured places on Hebdomadal Council must withdraw.

Academics argued strongly that exclusion of the representatives went against the 1968 agreement between the National Union of Students and the Committee of Vice Chancellors and Principals on reserved business.

Dons also voted 716-295 to give the vice chancellor, Mr Geoffrey Warnock, discretion to add other items to the confidential part of council agendas.

During the congregation debate, Mr Patrick Neill, warden of All Souls,

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Overseas news

Row over activist's sacking

Marcin Frybes, a former activist in Poland's banned independent students' association (NZS) has recently become the focus of a confrontation in Warsaw University's mathematics department. Mr Frybes was given a university post by the relevant government department, and then immediately dismissed by the rector on political grounds. This anomaly pinpoints the contradictions in Polish academic life under Jaruzelski and throws some doubt on the value of new legislation on tenure.

Mr Frybes received his MA degree in mathematics in 1981. New graduates are bound to work for the state for three years, and he set about finding a job. In January 1982, shortly after the declaration of martial law, the professor of mathematics, Professor Gutzki, recommended him for the post of technical engineering assistant in the department. The job is primarily administrative, arranging and coordinating timetables and study programmes - but is usually given to a new graduate.

The dean of mathematics, Dr Henryk Wozniakowski, and the director of the Mathematics Institute of the university, Dr Ryszard Engelking supported the appointment. Dr Henryk Sanisnowicz formally applied to the government Plenipotentiary for Graduate Employment, who gave his approval.

Frybes, who had been interned during the summer of 1982, started work on November 2, 1982. Nine days later, he was fired for having participated in a pro-Solidarity demonstration the previous day. Frybes maintained, and still maintains, that he took no part in the demonstration, and has witnesses to prove it.

By this time, Dr Samsonowicz had been replaced by a new government appointee, Dr Kazimierz Dobrowolski. When Professor Wozniakowski raised the case with the university senate, there was a heated discussion. Dobrowolski reportedly exclaimed: "It comes to this - either Frybes goes or I do". A vote of confidence was taken, and Dobrowolski won by two votes. In a face-saving gesture, the senate appointed a commission of lawyers to examine the case, chaired by Dr Zbigniew Salwa, a party member who specializes in labour relations and trade union matters.

In March 1983, the commission submitted its findings to the senate: Frybes, it found, had been wrongfully dismissed. By this time, a new tenure law had come into force, requiring the universities to give a form of tenure to all employees who had already been in employment on January 1. It had been known for some months that this law would come into effect, and Dobro-

wolski, at the time he fired Frybes, must have been aware of it.

On receiving the commission's report, Dobrowolski signed a contract of employment for Frybes, backdated for three months and non-renewable. According to some of Frybes' sympathizers, Dobrowolski seems to have been motivated throughout by a desire to avoid having to grant tenure to Frybes.

By this time, news of the affair had reached mathematicians abroad, who wrote to Dobrowolski expressing their concern that a colleague might be being penalized on political grounds. Dobrowolski eventually wrote back saying that this was a gross interference in the internal affairs of the university, and stating that Frybes was only a "mediocre" student, and not the right person for the job.

This claim is not strictly true. Grades in Poland are allotted on a scale of 1-5. Candidates receive three grades: one on the average of five years' university work, one for their written thesis and one for the oral examination. Frybes scored 4 in each of these sections.

Since April, Frybes has been without a job - in spite of Jaruzelski's regulations which oblige all able-bodied citizens to carry out "socially productive labour".



American doctors: 'will begin to expand high technology areas'

Teaching hospitals 'going into decline'

from E. Patrick McQuaid
WASHINGTON

A leading advocate for community health care believes that university teaching hospitals in the United States will go the way of their more commercially-oriented counterparts, shrinking in service and becoming "less socially relevant" to lower-income citizens.

Dr David Rogers, speaking at an annual assembly of the Stanford Medical Alumni Association, predicted that academic medical centres will rethink those services that produce deficits - among them home care, family planning, rehabilitation and social services - and try to eliminate them.

"We will see progressive shrinkage in the size of basic science departments and top heavy clinical faculties," said Dr Rogers. Clinicians who double as members of the teaching staff would be recruited largely for their abilities to attract patients with problems which result in high fees and good hospital reimbursements rather than for their teaching and research skills.

Dr Rogers is head of the Robert Wood Johnson Foundation in Princeton, New Jersey, one of America's largest private foundations that concerns itself with improved health care.

The poor will be most severely affected, he said, because while academic medical centres make up only 5.6 per cent of American hospitals, they provide a disproportionate share of 47.2 per cent of "charity care".

While 20 to 30 major academic medical centres, including Stanford, will be able to continue and even expand their biomedical research capabilities, Dr Rogers said, most others will decline. The latter will become increasingly training institutions for doctors, with less and less resemblance to other university graduate courses and more tenuous university ties.

"It is evident that the nation is at present unwilling to pay the full costs of all the research," he said.

In addition, because of the oversupply of doctors, and the high costs of care created in part by high technology and overspecialization, government

Southern students 'likely to quit early'

from E. Patrick McQuaid
WASHINGTON

Southern states have taken the lead in tackling America's serious shortage of maths and science teachers but academic achievement scores still rank well below national norms and the rate of students likely to quit school remains exceedingly high, according to a regional study.

The Southern Regional Education Board's report on higher education was delivered at its annual meeting in Florida. The agency is based in Atlanta, Georgia.

A special task force examined regional accomplishments against an agenda spelled out in 1981 and reported as the most notable trend the "new spirit of cooperation between schools and higher education" during the past two years.

The report said: "The region's momentum during the last two years in strengthening high schools graduation requirements, raising college admission standards, and mandating minimum requirements for teachers has propelled it to the forefront of what is

'God' essay upsets officials

from E. Patrick McQuaid
WASHINGTON

An essay on "God and politics" published in a monthly newsletter from the US Education Department worried officials so much that they destroyed the entire issue.

A two-page guest commentary written by the department's director of regional liaison, Mr Robert Billings, was considered inappropriate material for the government to be commenting upon, said a representative.

The newsletter was to be delivered to 3,400 college students but distribution was blocked by the department's assistant secretary for legislation and public affairs, Ms Anne Graham.

Mr Billings was executive director of the Moral Majority, the rightwing, fundamentalist Christian organization, before joining the Education Department.

His article accused public officials of being afraid to praise God in public and criticized the Supreme Court's recent decision to bar tax exemptions to schools practising racial discrimination.

The department did not block distribution, however, of a recent issue in which the National Education Association is harshly criticized for its stand on a nuclear war curriculum. Department representatives said this was "a policy issue... not a political one."

Racial quota system angers white liberals

from Craig Charney
JOHANNESBURG

Legislation to impose racial admissions quotas at South African universities has been approved by parliament amid bitter criticism and threats of defiance.

The new law replaces a system in which black students were obliged to seek individual ministerial permits to attend white universities. Instead, the minister in charge of white education, Dr Gerrit Viljoen, will now set the percentage of black students to be allowed at white institutions.

The new system has received intense opposition from the English-medium white universities, and from the Liberal Progressive Federal Party opposition. They argued that it would entrench university apartheid, and force universities which had previously maintained formally colour-blind admissions policies to implement racial discrimination on behalf of the government.

A bill to establish similar quotas for technical colleges was put through parliament on the heels of the bill for the universities.

When black students are admitted to white institutions under the quotas, Dr Viljoen stated in the house of assembly, they will be required to live in separate, segregated residences.

At the University of the Witwatersrand in Johannesburg, the students' representatives council called for defiance of the new law, through the elimination of all references to race from admissions applications. The same stand was taken by 200 academics at the University of Cape Town.

No decision has yet been taken by authorities at the English-language universities on compliance with the quota system.

Meanwhile, the Medical University of Southern Africa (Medunsa), one of South Africa's two black medical schools, has been closed since June 10, following a one-day student strike. The students were protesting at the summary dismissal of two former members of the students' representatives council.

Acting rector, Professor T. Dunston, said the action was taken because the two had "intimidated" fellow students. According to other students, however, they had actually pleaded unsuccessfully for moderating student opposition to a mandatory class trip scheduled by an English lecturer to the state theatre, seen as a symbol of government authority.

Professors lose majority on university councils

from Guy Neave
PARIS

Swingeing cuts are to be made in the numbers of outsiders sitting on university councils, following the debate on the future of the Higher Education Guideline Bill in the French National Assembly. The government also proposes to go some way in relaxing certain aspects of control over university finance.

The issue of how the universities are to be controlled has been the subject of acrimonious debate. In the student movement, both left and right have called for the number of non university worthies on such bodies to be reduced.

In future, university affairs are to be conducted by three councils: the administrative council, chaired by the university president (France's equivalent of the vice chancellor) which will have overall responsibility for the management of the individual establishment; an academic council and a council to deal with university studies and internal affairs.

The dispute between the government and the opposition over the number of seats to be kept for full professors in all three bodies was particularly bitter. Opposition attempts to have three electoral colleges with separate voting by professors, lecturers and junior lecturers, were thrown out without ceremony.

So too were attempts to reassert professorial power.

In future full professors will fill half

Entry rules 'hamper exchange'

from James Hutchinson
BONN

Tighter controls on the entry of non-EEC foreigners into West Germany have caused a big decrease in the enrolment of foreign students. Applicants from third world countries are affected most, but the restrictions are also reducing the intake from Japan.

The German academic exchange service (DAAD) complains that these and other factors are seriously hampering the mobility of students. Moreover the liberal reputation of German universities was suffering, and in the longer term harm would be done to international political and economic relations.

Foreign students and university teachers, the service declared, often became good ambassadors of Germany. DAAD is appealing to the ministry of the interior to ease the restrictions. As things stand, foreign applicants are granted residence permits in Germany only after they have been admitted to a German university. The rigidity of the procedure causes endless red tape, as well as hardship. Germany currently has 66,000 foreign students, of whom 35,000 are from developing countries.

It is feared that the decision of the centre-right government to make student grants repayable will cause a drop in the number of German students attending foreign universities. The exchange service explained that a spell abroad usually delayed graduation, and the longer the course, the higher the repayable loan.

will demonstrate a progressive unwillingness to pay all of the costs of sustaining those features which distinguish the academic medical centre from medical education, residency training, research and scholarly pursuits.

"In an effort to stay afloat, many academic medical centres will begin to expand all high technology areas - open heart surgery units, pathology laboratories, intensive care units, CT scanners and radiotherapy units," he said. "These generate respectable revenues."

"They will create or spin off potential profit-making enterprises, or establish satellite clinics or affiliations with smaller hospitals and other health delivery plans to ensure an adequate flow of patients. They may get involved in the construction of facilities for fee-for-service ambulatory care, preventive health services, or health spa."

"Faculty and hospital board meetings will increasingly resemble the annual stockholder meetings of multinational corporations."

Dr Rogers said: "It would be a dreadful mistake if academic medical centres became just another profit-making institution."

He suggested that academic medical centres should turn the spotlight on their unique social purpose - the training of young men and women to be the doctors of tomorrow.

"In the rush for bigness, medical students have almost been forgotten," he said. "More attention to the care and feeding of medical students should be given, more rewards to faculty for paying attention to them, more concern for their attitudes toward science, for the values they acquire, and the ways they approach the care of the sick."

"Despite the costs, academic centres should stoutly maintain their traditional mission of caring for the less fortunate."

He said academic centres should also seriously address the problem of the oversupply of tertiary care oriented specialists.

"It is killing you," he told the audience. "The crying need is for more generalist physicians."

Minister steps in to stop mergers

from Geoff Muslen
MELBOURNE

Forced amalgamations of two Australian universities with neighbouring colleges of advanced education have been stopped by the federal minister for education, Senator Susan Ryan. Higher education institutions at Armidale and Newcastle in New South Wales will not now be obliged to merge, as the former Fraser government had demanded, under threat of withdrawing their funding.

During the election campaign in March, the Labor Party promised to stop the amalgamations. Senator Ryan said the government had rejected policies of coercion and contraction which had been the "hallmark of the previous government's approach to higher education".

But the minister's decision also rejects clear recommendations by the Tertiary Education Commission that the four institutions concerned should be rationalized.

In a paper to the minister, the commission warns the decision will be more costly to implement and could result in the stopping of other mergers already under way. The previous government required economies of AS11m a year from the mergers of 39 CAEs, two of which have so far amalgamated with universities.

The funds saved were redirected in the 1982-84 triennium, the commission says. But if the mergers at Armidale and Newcastle do not go ahead and the institutions involved get increased funding as a result, other universities and colleges will also demand increased grants.

It points out that over the last five years the four institutions at Armidale and Newcastle have experienced significant declines in their full-time enrolments and that there is a substantial overlap in the disciplines offered by the organizations in each city.

Australian university and college academics seem certain to apply to the Arbitration Commission for registration, following a historic High Court decision. The likely move is because of a decision by the High Court to broaden the definition of the term "industrial dispute", and a clarification of what represents an industry.

The general secretary of the Federation of University Staff Associations, Mr Les Wallis, said it was likely the higher education associations would apply to the arbitration commission for registration after a federal executive meeting in July.

By applying for registration and allowing the commission to adjudicate in disputes between university and college administrators and academics.

Overseas fees 'break law'

from Lindsay Wright
WELLINGTON

Nearly two and a half years after receiving extensive submissions on the matter, New Zealand's Human Rights Commission has told the Prime Minister that the government's \$1500 fee for private overseas students breaches international law and agreements to which New Zealand is a party, and should be changed.

The fee was introduced in 1979 with an amendment to the Education Act by which overseas students from outside the South Pacific region were required to pay annual tuition fees of \$1500.

The New Zealand University Students' Association and Auckland University law lecturer Dr Jerry Elkind argued that the act "requires discrimination, not only between New Zealand citizens and non-citizens, but also between categories of non-citizen."

In December 1979 New Zealand ratified the UN Covenant on Economic, Social and Cultural Rights and in 1963 it had ratified the UNESCO Convention Against Discrimination in Education.

Toronto helps Peru with forestry programme

by Thomas Land

The National Agrarian University of Peru is about to establish the country's first post graduate forestry science programme. The project is aided by the University of Toronto under a five-year, \$2m contract. Peru is one of 14 countries in the focus of a global campaign to save the world's remaining tropical forest cover whose relentless destruction is associated with disastrous current climatic changes in the southern hemisphere.

Over the long-term, these changes may spread to endanger the world's foremost wheat-yielding areas - North America and Europe.

The Peruvian university, at La Molina, near Lima, is the main source of agricultural professionals required for revitalizing the country's farming sector. The university was severely damaged by a recent earthquake.

Dr V. Nordin, the dean of forestry at Toronto University and the executive director of the present project, explained: "This is a landmark in self-help higher education, and it will encourage Peruvian postgraduates to stay and work in Peru." His department is to coordinate Peruvian staff training at Canadian universities and assign five Canadian professors to teach at La Molina.

The project follows a series of studies over the past decade concerning the spreading, moon-like deforestation of the edges of mountains in Peru and Ecuador. The studies, conducted by Dr J. Lopez-Paredi of the Peru Proyecto Pari Janero Herrera and Dr A. H. Gentry of the Missouri Botanical Garden, suggest that the long-feared climatic changes resulting from large-scale deforestation have now begun.

The collaboration agreement linking the Peruvian university with its Canadian counterpart is to be financed from an award raised by the Canadian International Development Agency. In addition, the World Bank has just granted a \$17.3m long-term "soft" loan to Peru partly to improve the facilities at the La Molina university and partly to make up for the remaining damage caused by the earthquake in 1974.

Sri Lanka's eastern promise

from E. Patrick McQuaid
SRI LANKA

Sri Lanka's Ministry of Higher Education will soon send a delegate to Japan and the People's Republic of China to reach agreement on the mutual recognition of university degrees. Non-recognition of Japanese and Chinese degrees for purposes of employment has led to a large number of Lankan graduates not being eligible for employment in the local public service.

Once formal agreement is reached the government plans to send more students for diploma and degree studies in these two countries.

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Peter Scott reports from an international conference on higher education and research organization

Sweden's permanent university reform

"Research and Development for higher education" is a deeply unfamiliar and even uncomfortable idea in Britain. In Sweden it is the title of a large-scale Government programme made up of almost 40 major research projects.

The idea is unfamiliar in Britain because the academic base is probably too feeble to contemplate a Swedish-style higher education research programme, despite the achievements of the recent Leverhulme inquiry. Here educational research is a poor relation of the mainstream social sciences and higher education research is its orphan son; in Sweden the study of education is a central preoccupation of both social scientists and humanists.

The idea is perhaps uncomfortable because in right-thinking Britain it may suggest overmethodical social engineering. The University Grants Committee and the National Advisory Body, of course, have no research programmes and the Department of Education and Science tends to use one-off research to sustain or to disrupt the prejudices of ministers.

In Sweden where after almost three generations of Social Democratic rule (with a fleeting interruption in the later 1970s) reform is taken seriously, this substantial research programme is masterminded and paid for by the National Board of Universities and Colleges, the equivalent of the UGC and the NAB and a bit more beside.

The national board's research programme is divided into five broad problem areas: 1) the role of higher education; 2) the organization of higher education; 3) the conditions and potentialities of research; 4) the conditions and potentialities of education; and 5) R and D organization and planning.

However interesting shifts in the balance of the programme have taken place during the 1970s. Ten years ago the fourth area, teaching, attracted the most support, 43 per cent of the total grants made by the national board. Now it gets only 13 per cent of the money. The first area, the role of higher education in society, has maintained its

share at about 40 per cent. But areas two, three and five – organization, research and R and D – have substantially increased their shares.

The input of disciplines reflects a similar shift. Ten years ago education and psychology made the predominant contribution with 70 per cent, followed by sociology with 18 per cent of the grants. Today political science, philosophy, history, and economics, which made a negligible contribution at the start, have become much more prominent.

These shifts reflect the broadening scope of the national board's programme away from its original narrow base in education faculties within the universities, and also the growing interest of Swedish higher education in the organizational, sociological, and even philosophical aspects of policy and reform.

These new preoccupations were reflected at an international conference on studies of higher education and research organization organized by the national board earlier this month near Stockholm. There were over 60 participants, most from Sweden and deeply involved in the higher education research programme but with 15 visitors from abroad.

The conference was divided into three groups each with its theme. The first was "Higher Education Organization: Conditions for Policy Implementation", which zeroed in on the policy studies people and organization men (and women). It also reflected the Swedes' preoccupation with the meticulous evaluation of reform. Committed social engineers after all have to spend a lot of time on maintenance.

The second theme was "The University Research System: Performance and Policy". This was familiar territory for the science policy experts. But it too reflected a wider worry that was not confined to Sweden. This was the concern that higher education increasingly is being bypassed by those who want quick and useful research, and that as a result the proper articulation between universities and research has begun to creak.



Stockholm: centre of three generations of Social Democratic rule

The third theme was "Knowledge Policy and Knowledge Traditions in Higher Education". Here the futurologists of the knowledge society, the philosopher-intellectuals, and the humanists, apprehensive about the advances of mechanistic science came into their own.

But this theme too addressed a particular preoccupation of Swedish higher education – has the creation in the 1970s of comprehensive universities accelerated the process of academic drift and so impoverished the ethical, aesthetic, or simply practical qualities of higher education? One way to describe the conference was as an exercise in the fine-tuning of Swedish higher education policy, part of the process of permanent reform that is a feature of social democratic Sweden. Another as a slice through the layers of priorities of those engaged in higher education research.

According to this intellectual excavation Swedish higher education has moved from its original preoccupation with what could be called the

pedagogy of university reform to its organization and political economy. This took place during the 1970s.

An informed guess, on the strength of this month's conference, might be that in the 1980s Swedish higher education will show a growing interest in the basic values, cultural as well as intellectual, that are expressed through the university system. In other words, the preoccupations of the third theme on knowledge traditions.

This pattern is likely to be the same far beyond Scandinavia. Just as the narrowly-focused interest in pedagogy gave way under the impact of large-scale expansion during the 1960s and 1970s to broader interests in organization and structure, so in the 1980s the end of expansion and the beginning of uncertainty may lead to a more sustained exploration of the basic values of higher education. So, although the Swedes may have a different approach – a better one, may be – the centre-left in Britain may be tempted to sigh since June 9, they face similar dilemmas.

Twelve days before Sir Keith Joseph, Secretary of State for Education and Science, planned to announce that Sir Peter Swinnerton-Dyer would be the next chairman of the University Grants Committee, Sir Keith was taken aback. For the man he had been persuaded to accept as the chairman of one of the most influential jobs in higher education had just made a speech on Cruise missiles.

Worse, Sir Peter, attending a council meeting of the Social Democratic Party in Newcastle, was author of an amendment opposing the deployment of Cruise as long as the Russians would talk about nuclear reduction.

It was difficult enough that he was SDP. But speeches on disarmament just before his appointment was embarrassing. Sir Keith called in Sir Peter and asked him if he was intending to make any more speeches in the near future. "Yes," said Sir Peter. "Do you think you could manage to make them rather boring," said Sir Keith.

Sir Peter, aged 55, was very much the choice of William Waldegrave, then minister in charge of higher education. He regarded him as a super-intellectual who would daunt other recent chairmen. The only other serious contender was Maurice Shock, vice-chancellor of Leicester who preferred an Oxbridge master.

Sir Peter, always ambitious, clearly wanted the job. One other idea had been to stand as an SDP parliamentary candidate in his family home in Shropshire. He was a member of the SDP ruling council and drew up its original draft on higher education. He got to the shortlist of eight but withdrew when serious inquiries were being made about him for the UGC job. He will now have to give up the SDP.

Henry Peter Francis Swinnerton-Dyer is the 16th baronet, having succeeded his father in 1975. He explains the origins of his title: "We picked the wrong side in the Civil War and that comes expensive. We bought the baronetcy from William III. It was not for nothing."

The family fortunes were made by an able lawyer in the Elizabethan reign who was Lord Chief Justice, but made his funds first.

His family tree includes a groom of the bedchamber to the Prince of Wales (afterwards George IV) and, on his mother's side, a Brackenbury who was a custodian of the Tower when the princess were murdered. (He continued to hold the job afterwards, a sure sign of political flexibility, says Sir Peter.)

His mother is a former chairwoman of the National Federation of Women's Institutes. His father, an engineer, was also a chairman of Salop County Council.

He was always keen to meet students on an informal basis

Sir Peter went to Eton and his talent quickly emerged. He published his first mathematical paper when he was 15. It can be found in the journals of the London Mathematical Society under the name P. S. Dyer.

He won a major scholarship in Trinity College, Cambridge, and was elected to a prize fellowship in 1950, and then became a fellow and then dean of Trinity until 1973, when he became master of St Catharine's.

At the university he was a lecturer at the mathematical laboratory and in 1971 was appointed to a personal chair. He was a Commonwealth Fund fellow at the University of Chicago for one year in 1954 and was a visiting Harvard professor in 1971.

He was elected to the Royal Society in 1967 and became vice-chancellor in 1979.

He is remembered fondly at Trinity. Though abrasive when he was younger and caustic in his wit, and slightly shy, he was very popular.

It was as dean of Trinity that he first made his mark. He lived in college and it would be his practice to have open house in his rooms before dinner. Students and dons would drop in for a glass of sherry and find about a dozen other people there. He was always keen to meet students on an informal basis and played tennis and squash with them.

As dean he was responsible for student discipline. It was in the areas of the role of students and their representation in college government where he quickly shone and helped Cambridge to avoid some of the problems other universities had to experience.

According to David Harrison, vice

PROFILE

Ngaio Crequer looks at the career and character of the new chairman of the UGC



Dyer consequences

chancellor of Keele University who has known Sir Peter for nearly 30 years.

"He played a big part in guiding Cambridge into the twentieth century. There were plenty of dons then who did not believe in consultation, on proper procedures for students discipline."

"He played a big part in advising the university consultative committee and influential inquiries into the new roles of proctors. He did a lot of work on it and was very good at it."

He remembers the debt Sir Peter dealt with problems. One question came up: supposing a student hit the proctor, what would happen? Swinnerton-Dyer said it was a very serious thing to hit the proctor, therefore, the proctors must make sure they were never hit.

As dean he made sure he knew everybody and became involved in everything, so he could always anticipate problems before they arose. At Cambridge generally he served on most university committees at one time or another. He was always generous with his time, and meetings would sometimes start mid-evening and not finish till midnight.

According to Ian Nicol, secretary to the board, Sir Peter played a central role by sheer force of his personality. "He is also the only master I know where the new graduates line up and cheer him."

But in October 1981 he upset many people when he made his valedictory speech. He described some dons whose teaching and research effort fell away. "Some of them appear less and less in lecture room and laboratory; others merely give the same aging lectures from the same aging lecture notes... here as in every university there are academics who draw a full day's pay for half a day's work; and it is tenure that protects his state of affairs."

Some colleagues were offended, particularly as some were genuine retirees. They criticized his judgment and lack of timing. Others held that he was making an important contribution to the national debate.

Whatever one's views Sir Peter was not subsequently elected to the council of the senate, though he had served for about 15 years. His speech and the feeling that it was time for someone new, played a part. He was obviously hurt by the vote. In the past it had been routine to elect him.

Sir Peter has a tremendous capacity for hard work. When vice-chancellor he chaired the committee of academic organization inquiry into London University. He is a senior member of the Advisory Body for the Research Councils, he chairs the steering group plot-

ting the merger of the New University of Ulster and the polytechnic. He headed the inquiry into postgraduate completion rates.

But he has not forgotten his academic roots. He is an eminent mathematician and has done important work in four areas, differential equations, algebraic geometry, number theory and computing. It is unusual for someone to maintain a continued interest over so wide a field. He was an early pioneer of the use of computers in mathematics.

He has always insisted on doing a full lecturing programme, even when in high office and was instrumental in modernizing the mathematical tripos. He is described as a good chairman, with a clear mind and great capacity to listen. He is able to formulate the sense of a meeting. He does not like wordiness, verbosity or inefficiency but he is not unkind to those who fail to reach his standards. He is not autocratic.

In Northern Ireland Sir Peter has never refused to meet a group, however trivial their point. He makes people feel they genuinely have access. Derek Birlie describes his chairmanship as that of a "benign steamroller". He has been careful not to mention the steering group in the merger so that those who run the new university can properly take over.

He uses his humour to defuse potentially difficult decisions. He is very witty. He enjoys reconciling those in entrenched positions. He can play politics though he is not a backroom manipulator.

Not is he easily manipulated. What he was chairing the inquiry into London University, Lord Annan, the then vice-chancellor, wanted the group to speed up their timetable and report earlier than agreed because the financial situation had deteriorated.

Sir Peter thought this was unnecessary interference, undermining his authority and the group's credibility. He quickly mustered the committee together and drafted a letter which observers say amounted to one of resignation.

In fact he had no intention of resigning but he won his point. He says he is not a resigning man, having resigned only once in his career, from an area health committee because, he says, it was a waste of time.

He is described by those who have worked with him as someone who will say if a minister is wrong. Equally he will stand up to the universities if necessary. He relishes difficult decisions.

He is a good draughtsman. Sometimes he sits on one committee making notes for another. But sometimes he

makes his mind up too quickly and mistakes are made (as with the damning criticism of Chelsea College).

This willingness to stay behind, always to be prepared to talk has already proved an asset. No doubt inspired by his family motto, "Unwilling to fight, unacquainted with fear," he has accepted an invitation to address the Association of University Teachers council, something Sir Edward Parkes, his predecessor at the UGC declined to do.

Actually the mistake was more of an accident than design, made by a member in an excess of zeal. Many other AUT members thought it was wrong that Sir Peter, known to have strong views on tenure, should have been asked to come. He was given an opportunity to change his mind but he declined.

His wit and charm turned it into an impressive performance

In his speech he said that tenure went too far, the Americans had got it about right, that there should be early retirement, possibly compulsorily, up to the year 2000 and that in the arts "research was for free". Council had been warned several times by the chairman to hear Swinnerton-Dyer out: in fact his wit and charm turned it into an impressive performance and the AUT questioning was lukewarm.

What then are his views? David Harrison describes approvingly him as a benevolent elitist and thinks that he Lord Flowers, an old friend, who soon becomes chairman of the Committee of Vice-Chancellors and Principals, and Sir David Phillips, at the ABRC, will prove a formidable team.

He is persuasive. The "new blood" scheme and the complementary Royal Society fellowships owe a great deal to his promotion. He played a big part in the discussion about how the "new blood" scheme should operate, whether the UGC or the Research Councils should run them, or whether it should be a joint operation.

The protection of research will be a dominating aim and inevitably this will mean even more selectivity. He has already started that debate by making the distinction between research and scholarship. He told the AUT he did not favour a tier structure, with some universities doing mainly research and others concentrating on teaching.

One obvious point is that he has limited experience of universities. He only knows well Cambridge, some American universities and of course

London. He will need to do some field work.

He is instinctively against earmarking but thinks the problem will be how to protect the good department in the less good university.

In a private speech last month to some overseas university teacher unions, when both parties agreed not to release the text to the press, Sir Peter said that procrastination over early retirement "may lead to a situation which can only be solved by an attack on tenure more radical than anything which is now being contemplated. I don't want to see that happen; but we are moving into a world in which delay is less likely to be a good defence than it used to be, and in which to describe something as unthinkable is no longer an efficacious protection."

He went on to talk about the kind of courses offered by universities. "The claim that only the teachers can decide what courses are best suited to the needs and abilities of students is one which needs justification – and is not at the moment finding it."

More interesting are his views on the binary line. In the Ulster merger of course it will be abolished and he will be better placed than anyone to see what the implications are for the rest of Britain.

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The problem of how to sustain the good department

In his speech he raised the question of the difference between universities and polytechnics. "If the two sides are not fundamentally different, ought there not to be some relation between their unit costs? The only strong claim to a fundamental difference that I have heard is that universities are meant to do research and polytechnics are not – and polytechnics would certainly challenge that statement."

He also said he could foresee a time when the UGC grant was made up of three components and universities were told how their grant was made up. The components would be: a formula-based allowance for teaching, based on student numbers and around 100,000; a formula-based allowance for research – which needs justification – and around 100,000; and a formula-based allowance for support system; and allowance for special circumstances. "It would be very hard not to relate the formula for teaching costs to the corresponding formula for polytechnics."

As for research "the principle that every academic must be funded to do the research they wish to do cannot survive much longer... very soon there will be departments that are not expected to do research, and that have no funds for it. That raises the problem of how to sustain the good department in a bad university... that problem may prove too hard to solve. If so we shall come to have what America has now – universities which are respected teaching institutions but which have no research component." And, according to Sir Peter, "this would not be too terrible a thing."

Finally, Sir Peter is pledged to make changes in the UGC itself. He has said it cannot afford to be less open than the National Advisory Board. He has ministers' support for getting the UGC to explain itself in public. One idea may be for the committee to produce commentaries on its grant allocation. But whether Sir Peter can bring the rest of the committee with him will be interesting to see.

His style is instinctively open and that may have more lasting effect than any change in structures. Though his credentials may seem formidable, he is good company and like a good SDP person, knows a good claret and port.

He has a fast mind and enjoys games. He was an international bridge player and was once the non-player captain of the British women's team. He was also responsible for a change in the rules when he noticed that he could make an impossible bid and incur a lower penalty for failure than he would be letting his opponents make a bid. "After he had tried it in a tournament the rules were changed."

He has also said that the book which has influenced his career more than any other is S. J. Simon's *Why you lose at bridge* which contains the guiding principle "aim for the best result possible, not the best possible result".

He also plays chess and a more unusual game involving spiders stalking flies along the ribs of an icosahedron (a 20-sided solid). No doubt all useful experience for his new job.

Social democracy clashes with the frontier spirit

Two fissures of disagreement, on the proper role of the state in higher education and the imperialism of science, ran through the four days of discussions at the conference, which was held on an island at the edge of the Baltic 30 miles from Stockholm.

The first developed into a battle between the Americans and Europeans with Professor Martin Trow, director of the Centre for Studies in Higher Education at the University of California at Berkeley, and Rune Premfors, a political scientist at the University of Stockholm, as their respective champions.

For Martin Trow, "the state was all thumbs and no fingers" and incapable of making the fine adjustments needed to satisfy changing demands. For Rune Premfors, the intervention of the state was necessary to produce a healthy and balanced development of higher education to meet social needs. It was the old dichotomy of de Tocqueville: freedom, in the shape of

change, or equality, in the shape of justice.

In his own plenary paper, a case study of academic leadership at Berkeley, Professor Trow made this explicit. Excessive state control in Europe had led to a neglect of institutional leadership. Perhaps for the simple reason that European institutions and those derived from European models do not give institutional leaders very much power.

Professor Burton Clark, head of the comparative higher education group at the University of California at Los Angeles, extended the argument for diversity. He argued that the growing complexity of higher education meant that we had to accept some functional inequality. "Equal treatment" became more and more difficult to define let alone maintain in the face of growing diversity.

He concluded: "Higher education is a realm *par excellence* for defending small favouritisms and the vitality of local groups. Limited inequities are not

only functionally necessary but offer some defence against the unlimited ones that eventually flow from the tyranny of the regulators."

The Swedish reply in broad terms was to admit that there were some things in higher education which the state could not do but to insist that there remained things which the state, and in a few cases the state alone, could do. Jan Erik Lane, a political scientist from Umeå University, concluded: "Examining Swedish higher education policy in terms of the logic of its decision making and the implementation of its programmes and goals we do not find evidence of extensive irrationality and fundamental policy failure."

But both he and Rune Premfors accepted that there had been an attempt to introduce administrative and planning procedures that were not always consistent with the nature of academic work.

The last word from Rune Premfors: "The choice of implementation strategy will never be a 'technical' matter. It has important implications for two of the most basic values in higher education, autonomy and accountability, values which are in their turn in a complex fashion related to other basic values such as equality and excellence."

The second fissure concerned the alleged imperialism of science and technology and their crowding out of the humanistic and more expressive and practical subjects like music or nursing. Here there was not so much a disagreement but rather a contrast between the complacency of those who did not really take this issue seriously and the partisan desperation of those who did.

Professor Gernot Bohme, a philosopher from the University of Darmstadt in West Germany, painted a gloomy picture of the technological future. He argued that in the future the structure of society might be determined much by participation in expert knowledge as by ownership of property and other more traditional factors. Many therefore would find their status undermined. They would become the objects of knowledge in the computers of bureaucracy of a new registration society.

Gunnar Bergendal, rector of Malmö school of education in the University of Lund and formerly secretary of the influential U-68 commission which reformed Swedish higher education, argued that Swedish universities encouraged a one-dimensional view of knowledge. "Knowledge is thought of as distributed in a Cartesian space of objectivity in which all points are of identical and impersonal character," he explained.

He listed four factors that had encouraged this one-dimensional view of knowledge. First, widespread choice of subjects in the upper secondary school had made it difficult to produce a properly integrated curriculum; second, the practice of gradual specialization in universities meant that broad introductory courses had to be superficial; third, large institutions encouraged homogeneity; and finally, admission to higher education imposed

more practical terms many participants at the conference, especially those assigned to theme three, who came from outside the traditional university faculties, felt threatened by what Professor Bohme called "scientification" but might be more familiar in Britain as academic drift. More orthodox entry requirements for students, the need for academic staff to have PhDs, the search for an adequate research base, were all sources of worry.

Yet hardly anyone was prepared to say that the decision in the mid-1970s to incorporate all forms of higher education in comprehensive universities had been a mistake. The prospect of a British-style binary policy or an American-style hierarchy appeared to no one. It was also clear that some of the most intense pressure for academic drift came from those within the non-traditional faculties and departments, rather than their academic colleagues.

So when Professor Clark observed that by the end of the century the decision by some European countries, including Sweden, to establish comprehensive universities would be seen as a "huge error", he received little support. Clearly in Swedish eyes the war against Cartesianism had to be an offensive struggle on a broad front

rather than a defensive one from isolated strongholds.

The second theme, on the university research system, produced much less controversy. Here a commitment to relevant research was reaffirmed together with some caution about too precipitate a rush into utilitarianism. Stuart Blume, formerly at the London School of Economics and now at the University of Amsterdam, argued that universities should resist an arbitrary classification into "useful" and by implication "useless" subjects.

More hopefully he predicted that in the 1980s there would be a move away from the highly specific research policies of the last 10 years and towards the broader identification of fields of study that seemed promising both intellectually and in their likely application.

The same broad agreement did not apply to views about the usefulness of theoretical models in higher education research. In recent years models have proliferated – administrative models, loosely-coupled models, garbage-can models, forward and backward mapping models, even from Burton Clark with his tongue half in his cheek "the model of the master matrix" or the 3M for short.

It was all too much for Martin Trow who attacked models as "theorizing in cold blood" and "willful theorizing". He appealed for more detailed case studies, what he called "the natural history of particular reforms".

He added that models were often a handicap to the search for knowledge and quoted T. S. Elliot with approval: "making the will do the work of the imagination".

But, perhaps to show the cultural gulf between Social Democratic Sweden and Republican America is not unbridgeable, Professor Trow did express some qualified approval for another model, that of a changing contract between higher education and society, that has been devised by Karin Fridjonsdotter of the University of Lund. Perhaps we should not be surprised at this exception. After all, the British experience in that it is bridge wide gaps that we invent "social contracts".

Editor: Nick Page

HIGHER EDUCATION

That was the year that was

On December 31, 1982, THE THES published a special review of 1982 as it appeared to the tertiary sector of education. In separate articles there were examinations of policy, universities, the public sector, unions, teachers training and the National Union of Students. Developments in science, social science, adult education and the problems of the young were also featured. Special reports on higher education in Scotland and Northern Ireland were included, and in the international section, North America, France, South Africa, West Germany and Poland. There was a sampler of the year's features encompassing Sir Peter Parker on pluralism to Dr Roy Porter's analysis of the impact of fashion on the sciences.

The eight-page review has now been reprinted and is available to readers at a cost of 60p each (including postage) from the address below.

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Karen Gold looks back on the retraining experiment that followed a steelworks closure

In September 1980, the British Steel works at Consett closed. The Durham town became a byword, a stark social model of what was happening on a smaller scale and more haphazardly elsewhere.

But Consett also stood out from other major centres of unemployment because of an education and training scheme - common in Europe but almost unheard of in Britain - written into the redundancy terms of the 4,350 steel workers employed at the time of the closure.

After their lump sum redundancy pay averaging £9,000, men under 55 and women under 50 were offered an entitlement to 100 per cent of their previous earnings, for a maximum of 52 weeks during the 78-week period following redundancy, if they followed an approved training course.

Eventually, 1,239 ex-British Steel employees - around 30 per cent - attended courses provided for them by Consett Technical College. By far the largest group, almost 700, went on a specially constructed basic education course, the rest slotted into existing college provision.

An unpublished study of that basic education course reveals just how unprepared the further education system was to respond to mass unemployment, and how wide is the gap between expectations of employers, manual workers and teachers as to what education can and should do for the unemployed.

The idea of the study was quickly taken up and funded by the Further Education Curriculum Review and Development Unit (FEU). It emphasizes that Consett was an example of crisis management of unusual proportions, and nowhere suggests that the college performed any better or worse than others would do under similar circumstances.

The study, which used a combination of interviews and questionnaires and was carried out by the college director and an FEU researcher, suffered from hostility and suspicion by students on the basic education course, who saw little difference between the FEU and one department in Whitehall and the Department of Industry in another, and therefore believed, despite denials, that their time and information were in fact going to benefit the BSC.

That hostile atmosphere affected the education scheme from the beginning. In some ways that was due to its novelty, and would disappear if such arrangements became common. But the study found it was also intrinsic to any arrangements made when a workforce is still fighting the very principle of redundancy, or in this case closure.



The road from Consett

So by the time all sides had accepted the closure, the autumn term was days away and almost no specific provision at the college for ex-Consett workers had been made. Various men turned up at the college independently, and in early September the principal, two tutors and ex-students visited the BSC counselling centre.

Posters then went up at the steel-works and around the town, asking, "Do you want to brush up your English and maths to get you on a TOPS course?" From the beginning with that explicit link the TOPS preparatory course was the model for the basic education course, though with adjustments in hours allocated to communication, number and life and social skills, and the addition of workshop/craft skills.

But the choice of the TOPS model occurred because of a profound division between the BSC, the college principal and the staff over what the steel-workers were entitled to and what they should be offered. Although the BSC admitted that employment prospects in the region were poor, they perceived the courses and the pay for them as preparation for further training for jobs, the report says.

Although the courses themselves did not have to provide job-specific skills, entrants to them had to specify what kind of work they were aiming for before they were admitted, and the BSC rejected both proposals for wider-ranging courses and individual applications.

College staff, on the other hand, thought the course should be more geared to preparation for leisure/unemployment, and the principal of studying the nature of unemployment,

social and welfare rights. An additional factor was that since most of the students had steered well clear of the education since leaving school, they had widely differing hopes and expectations of the courses.

The contradictory views of the BSC and the college were quickly - and damagingly - picked up by the students in the interview and assessment procedures. Both the local BSC training officer and the college's head of technology interviewed the students, but long queues soon formed outside the latter's door as rumours spread that the BSC man was operating stricter criteria. Eventually the BSC gave up the interviewing role, and vetted course recommendations instead.

By now it was November 1980 and there were 176 applicants for the basic education course. To try to establish an objective assessment, applicants were given a maths and English test to do and bring back the following day. Being faced with a test proved a sufficient deterrent for 20 per cent of the applicants not to come back at all. But the test was also unsatisfactory in other ways. Its results were related to the vocational area chosen by the applicant so that, broadly, the lower the initial educational level and the higher the educational level demanded by the proposed vocational area, the more weeks - varying from 12 to 30 - the applicant was offered on the course.

Not only was that clearly unrealistic in educational terms, but it could not take account of whether the test had been completed unaided, it was seen by steel workers as arbitrary and unfair, and it led to gross financial inequalities.

College staff, on the other hand, thought the course should be more geared to preparation for leisure/unemployment, and the principal of studying the nature of unemployment,

The difference between an allocation of 12 and 24 weeks was more than £1,000 of make-up pay; the head of department making that decision daily was threatened several times with violence.

Towards the end of 1980, the college was beset by applicants and suffering from a severe shortage of staff, the report says. Yet the staff who were there, though actively taking ex-steelworkers on to their existing courses, were far from wholeheartedly behind the basic education course.

Most established staff were not interested in adult basic education, which they saw as low-level work, the report says, and it quotes the course coordinator: "Senior members of staff have said to me, 'How's your add-ups and take-aways coming on?', laughing, jokingly, but with a lot of needle in it. 'After all, we are a technical college, and this is not a technical subject' ... these were words used to me."

By the end of January 1981, 26 part-time staff had been recruited on to the course, whose numbers now had reached about 100. They reached their peak the following January at 235, and fell away after that until the redundancy agreement ended in May 1982.

Only four of the staff working part-time were full-time members of the college staff; the rest were recruited from outside. In April the local authority agreed to six temporary full-time appointments, making coordination considerably easier, but shortages of materials and space continued to affect the provision until the course moved into college annexes and later on into community buildings, halls and working men's clubs.

It was in the working men's club that

the greatest problem over curriculum and teaching style occurred. Most of the students and tutors initially preferred a "workshop"-style approach, but tutors became increasingly aware that this meant hesitant or unmotivated students could avoid them and not only at things they knew they could do.

They never entirely solved this problem, the report says, although they did manage to expand the curriculum and attract interest from students in subjects they initially rejected: art and literature, town and country planning, welfare rights, cooking and a series of visits. From the spring of 1981 until the end of that year and beyond, the courses became smoother-running and more successful, and the report included examples of poetry and prose emphasizing the high standard of some of the work.

Moving into the community happened relatively slowly - around February last year - although it was proposed by the principal some time earlier. Staff were unconvinced that it would be a success, and when it started morale was already flagging as the end of the BSC sponsorship period approached. The new move did attract other unemployed people apart from ex-steel workers, but the numbers were very small.

Appeals were made to the BSC, to the Manpower Services Commission and to the Durham education authority to continue to fund the course after May, none agreed. But the end of the Consett course was determined above all by the fact that after their BSC sponsored weeks were over, hardly any of the students returned.

Even arrangements for courses shorter than 21 hours a week, so they did not lose social security benefits, attracted little response. Most students interviewed said they thought the BSC course should have been longer, but clearly few held that opinion strongly enough to seek more education for themselves.

The reasons for this are not clear; undoubtedly, as the report acknowledges, some of the students on the course had simply been motivated by the extra income. Nevertheless the college did not manage to change that motivation in the time they were there. Most of all perhaps, unemployment by last year was considerably higher than when the course began, and their vocational usefulness seemed even more doubtful than before.

The report does not include information on what happened to the students after they left the college; a significant omission from the remit and a handicap in assessing a rare, worthwhile and poignant educational experiment.

importance that a perspective other than that of the practising broadcaster is needed, he believes. The innovations of Channel 4, breakfast television, cable and satellite are forcing people to question the assumptions of the last 30 years.

Jeremy Isaacs, chief executive of Channel 4, and also a Baird centre adviser, giving a lecture to mark the centre's inauguration, suggested that while conventional broadcasting was important, addressing the largest possible audience, its likely corollary was a refusal to appeal to certain audiences for fear of offending or losing viewers.

It has taken many years for television to become academically respectable, but Stephen Hearst is not surprised.

"It wasn't really until the 1960s that people agreed to have the thing in their drawing rooms. When I started in broadcasting and did a programme on Oxford, the distrust was so great that even to get permission to film a touriste in Oxford College needed a full meeting of the fellows."

On the film side, research is likely to be of a more traditional kind, examining both individual films and the social and cultural conditions under which they were produced.

It is hoped to research the development of national cinemas, not least the renaissance of the Scottish film industry: at the directors' forefront in this year, two of the films, *Local Hero* and *Living Apart Together* were directed by Scots.

"We are very conscious of the problem of a nation which is on the periphery of broadcasting and film institutions. We're not just concerned to oppose centralization, but to offer alternatives," says Colin MacCabe.



William Wilberforce: leader of the anti-slavery campaign



Africans were seized from the Ivory Coast and transported to the West Indies

The fight against slavery . . .

This summer the city of Hull is recognizing the memory of one of its most famous sons, William Wilberforce. Next month, there will be an exhibition in the university library; the New Theatre, Hull, will premiere a new musical play, *Wilberforce*; and there will be exhibitions and performances of African tribal arts and crafts. The festival culminates in an international conference and services at Holy Trinity, Hull, and Westminster Abbey.

tionists such as Isaac Milner and the Rev. John Newton.

Converted to evangelicalism Wilberforce joined in 1787 the Committee for Abolition of the Slave Trade and in cooperation with his fellow members of the "Clapham sect" set about trying to translate the committee's objectives into positive parliamentary action against the slave trade. It was a daunting task, for ranged against the abolitionists were the powerful West Indian planter interest and, following the revolutionary events in France and St Domingo, the more reactionary sections of the Tory Party. But in Wilberforce especially, the abolitionists clearly had a powerful and eloquent advocate for their cause.

A man of not inconsiderable wealth and great personal charm and integrity, he was well connected politically and socially, being a personal friend of the Prime Minister, William Pitt. Despite this, however, he remained essentially independent and as a result was able to elevate the issues of the slave trade and slavery above the level of

party politics and to invest the cause of abolition with his own considerable moral authority.

After 20 years of parliamentary debate and several unsuccessful bills, victory over the slave trade was achieved in 1807. Twenty six years later came the greatest prize of all, the ending of slavery within the British Empire.

Since 1833 the causes of the Abolition Act have been subject to much reexamination. During the first century after abolition, the anti-slavery movement was seen largely through the speeches and diaries of the abolitionist leaders themselves, notably Wilberforce. Not surprisingly, therefore, the Abolition Act was accepted as the triumph of selfless morality and humanitarianism over narrow materialism and vested interest. In the words of one of Wilberforce's biographers, Sir Reginald Coupland, the Abolition Act was "the noblest measure" in the history of the House of Commons.

More recent interpretations of abolition have been rather less generous to

Wilberforce and his friends. Some have indicated that despite his eloquence and skill in parliamentary debate, Wilberforce was rather inept at organizing votes in Parliament: the act abolishing the slave trade in 1807, often seen as Wilberforce's greatest personal achievement, was in fact guided through Parliament by James Stephens, a lesser-known abolitionist, and the Prime Minister, Lord Grenville.

Others, notably West Indian-born scholars such as C. L. R. James and Dr Eric Williams, formerly prime minister of Trinidad and Tobago, have challenged the traditional view of abolition in a more fundamental way, arguing that the origins of anti-slavery lay less in humanitarian revulsion against the system and more in the expansion of British industrial capitalism after 1783. Wedded to the new political economy of Adam Smith with its free trade ideology, the rising industrial bourgeoisie and its political allies allegedly saw slavery and the sugar monopoly associated with it as an

integral part of an over-protective and stifling mercantilist system which had to be eradicated if industrial capitalism was to flourish. In the opinion of James and Williams, economic vested interests associated with capitalism killed slavery in 1833 not disinterested evangelical humanitarianism.

Those proposing this economic explanation for abolition have found support for their argument in the declining importance of the slave-based sugar colonies in British overseas trade after 1783, the adherence of many of the non-evangelical supporters of abolition to the political economy of *laissez faire* and, most significantly, of all perhaps, the juxtaposition of abolition with other major reformist measures around 1830, notably parliamentary reform and the New Poor Law, both symbols of the rising ascendancy of the industrial bourgeoisie. As might be expected, such arguments have not received universal approval, and in any case should not be allowed to deny the very real contribution of humanitarianism to abolition.

The anti-slavery campaign was initiated primarily by those such as Wilberforce who objected to slavery on moral grounds and was expanded by them into the first mass movement in British history. The fact that moral objections to slavery also came to be seen by some as making economic sense served only to make the abolitionists' challenge to the vested interests surrounding slavery ultimately irresistible.

David Richardson

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. . . and what became of it all

the societies where slaves were freed, it might be replied: "Not much." In the West Indies, for example, abolition did not give rise to a vigorous peasant development, largely because the wrong people were compensated with the £20m set aside by Parliament for emancipation (ie a few thousand planters and not the three quarters of a million slaves).

Instead, there followed what became known as "the ordeal of free labour" and worse, what has been referred to as "a new system of slavery": in the indentured immigration of nearly half a million Indians from 1838 to 1917. Then it is a nothing to develop the West Indies then is a conclusion which the people of the region reap now as their government seeks, with varying degrees of failure rather than success, to overcome the bitter legacies of economic dependence, racial division, political subservience and cultural impoverishment which the plantation legacy has bequeathed them.

In another direction, however, a more promising picture emerges and the judgment of "a great deal" can be made. The rights of man, said Thomas Hardy, founder of the London Corresponding Society and champion of anti-slavery, "are not confined to this small island but are extended to the whole human race, black and white, high or low, rich or poor". In 1956 the white, high or low, rich or poor. In 1956 the white, high or low, rich or poor. In 1956 the white, high or low, rich or poor.

In one direction, that of the expectations of the abolitionists themselves of consequent changes in

the Protection of Human Rights. Latterly the human rights aspect, albeit still closely associated with monitoring abusive labour systems and protection of indigenous peoples, has become more prominent in its work.

In this it both anticipated a burgeoning and concerned public opinion in recent years and followed the development of a considerable body of international law enacted since the Second World War on the subject of human rights. This latter aspect, more than any other, has given rise to a significant international consensus that national governments have an obligation to their citizens in this field.

Violations, of course, are frequent and now, more than ever, frequently denounced. Nevertheless this does not detract from the fact that in certain fundamental areas - the right to be free from governmental violations of the integrity of the person; the right to the fulfilment of vital needs such as food, shelter, health care and education (but critically not yet the provision of work); and the right to enjoy civil and political liberties - governments recognize the validity of claims made upon them and are signatory to the various international and regional instruments "binding" them in this regard.

What William Wilberforce himself might have thought of all this 150 years on is at present the subject of informed speculation both in the city and the University of Hull. Wilberforce is perhaps Hull's most famous son and his "good works" are remembered in the city not only by his

elevated position on top of a column in the centre of town but more accessibly by the preservation of his house as a museum commemorating his life and in particular his contribution toward abolishing the slave trade. Less predictably, but in many ways more fittingly, the city has become twinned with Freetown in Sierra Leone, so promoting a continuity of past and present, albeit at a corporate level, with one of the more positive outcomes of the ending of slavery and the slave trade on the African continent.

The same link exists in the case of the University of Hull whose present chancellor, Lord Wilberforce, is a direct descendant and whose present vice chancellor, Sir Roy Marshall, is a Barbadian and former vice chancellor of the University of the West Indies. Unsurprisingly, in the light of this, the university's commemoration programme, in its educational aspect, has reflected on the role of Wilberforce in freeing the slaves in a series of public lectures entitled "Out of Slavery". It will consider in July, in an international conference entitled "Legacies of West Indian Slavery", the dimensions of that particular problem.

Wilberforce himself, from his tomb in Westminster Abbey, might not only have approved of such a programme but might also reflect that it is in the once prosperous fishing town of Hull that most is being done in the 150th commemorative year to celebrate the end of that more odious fishing by Britain for people on the African coast.

Paul Sutton

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Getting the measure of the media

Olga Wojtas reports on a joint venture by Glasgow and Strathclyde universities

graduate course is broadly seen as producing graduates who will work in film and television, one of the few growth areas for art graduates.

The new Baird centre, however, staffed by the four media lecturers and Professor MacCabe, will be geared more to people wishing to teach media studies. Professor MacCabe feels. It will offer both M Litt and PhD degrees, with five or six research students accepted annually. It is hoped eventually to expand the centre: the staff wishfully cite the example of film and media studies at Stirling University which has the invigorating presence of a research professor, Alastair Hetherington, former editor of *The Guardian* and controller of BBC Scotland, funded by the BBC, IBA and the Social Science Research Council.

There are already a number of media research centres, but they tend to have a sociological slant rather than an arts one.

"The only things which have been done in depth are bias in current affairs and news programmes and audience research and the political effects of broadcasting," says Colin MacCabe.



Colin MacCabe: offering alternatives

Stephen Hearst, special adviser to the director general of the BBC, and a member of the Baird centre's advisory committee, admits that broadcasts have been very suspicious about the whole thing distrust statistical methods. What interested him and a fellow committee member, Brian Wenham, the BBC's director of programmes, he says, was Colin MacCabe's belief that English literature and its discipline should be brought to bear on the communications industry.

The Baird centre, Professor MacCabe stresses, is the only place with its main focus on television from an arts perspective.

"It's interesting that when the centre was launched, the press latched on to academics watching *Coronation Street*. Soap opera is only about a fifth of the field, but why do people think it's funny to study the most popular

dramatic form there has ever been?" Staff at the centre are also anxious to affect the way media studies are introduced to schools. Media studies are proliferating, but in a very haphazard way, says Gillian Skirrow of Strathclyde. She thinks it seems an ideal course for young people who cannot find jobs, since it will keep them happy while making them feel involved in something progressive with possible job prospects. But no philosophy of the subject has been developed before introducing it.

"There's a feeling that because everyone watches TV everyone knows what it's about, but people filter it through their own discipline, whether it's English, art or modern studies. If it means something different to all these subjects, it will never be looked at coherently."

Staff at Stirling are researching the introduction of media studies to Scottish schools for the Scottish Education Department, and a group including teachers and the Baird centre staff has been formed in East Strathclyde to draw up a possible media studies course.

It suggests that media studies should come under the aegis of English. "English is about the way a society represents itself to itself," says Ms Skirrow. "In the nineteenth century, the dominant form was the novel, in the twentieth century the dominant form is television. I think it would do a service to literature to take account of TV and film."

Professor MacCabe adds that forms developed by television which have never really been considered are the drama documentary and situation comedy. Television is of such great cultural

MILLESTONES

Sir Harold Acton looks back at Walter Pater's collection of essays, *The Renaissance*

The library of my first school in England almost discouraged me from reading: those battered volumes by Henry Rider Haggard and Captain Marryat were probably full of good meat which I might enjoy today, but at the age of 10 the mere sight of them depressed me. Unusual words appealed to me more than unusual adventures, perhaps because one of our teachers quoted a saying of Caesar's that an unusual word should be shunned as a slip should slun a reef.

Luckily a slim red volume caught my eye among the dog-eared Murphys: *The Renaissance* by Walter Pater (Macmillan's Three Shilling Library). Like a rare goldfish in a turbid pool, how had it slipped in there? I eagerly scanned the contents. Here were essays on the artists I fervently admired, apart from certain personalities then unknown to me. Between lessons and organized games I read it avidly by fits and starts, fascinated by the rhythm of its prose, not all of which I could grasp at a first go. Some of the elaborate paragraphs and dependent clauses were difficult to follow, but the difficulty acted as a spur to read on in a sort of reverie.

On the first page of the preface Pater wrote: "To define beauty, not in the most abstract but in the most concrete terms possible. . . is the aim of the true student of aesthetics." This was encouraging, for I became lost in abstractions.

At the age of 10 it was too soon to speak of a "variegated dramatic life". School life might be variegated but it was seldom dramatic, except when a Zeppelin loomed overhead, or one was summoned to the headmaster's study for punishment. But even then one had moods of insight or intellectual excitement, as when I discovered this book - passion would come later.

Though much of Pater's writing was above my head on first acquaintance, I tried earnestly to follow his advice about burning "with a hard, gemlike flame". Of course I kept this to myself for fear of ridicule. As I lived in Florence most of the subjects of Pater's essays were already familiar to me. The city possessed three versions of Michelangelo's David: the original in the Academy and two replicas in marble outside the old town hall and in bronze on the panoramic esplanade named after the artist, besides the myriad reproductions in shop windows. The copies bore as much relation to the original as gramophone records to the performance of a great musician. How perceptive was Pater's observation of Michelangelo's concern with individual expression, "the special history of the special soul", as contrasted with the extroverted Greeks, and of Michelangelo's apparent incompleteness, which he explains as the equivalent for colour in sculpture. It is his way of otherworldly pure form, of relieving its stiff realism, and communicating to it breath, pulsation, the effect of life.

I have read these essays so often in the last 60 years that they must have melted into my subconscious and the pristine freshness of the three shilling volume has evaporated. The purplest passages, such as the rhapsody on the Mona Lisa, which W. B. Yeats printed as a prose-poem in his edition of *The Oxford Book of English Verse*, have faded to pale mauve from excessive quotation, but the underlying message prevails; we should constantly test new opinions and court new impressions, "never acquiescing in a facile orthodoxy". We should select and treasure those impressions whose singular beauty has delighted us, appealing to our "imaginative reason" through the senses.

Without any claim to scientific expertise Pater understood intuitively that Giorgione's pictures are, as Bernard Berenson was to write, "the perfect reflex of the Renaissance at its height". In his appreciation of *The School of Giorgione* he underlined the conclusion that "all art constantly aspires towards the condition of

music", and his book seems to have been designed like a sonata: *adagio, andante, andantino, adagio molto, pressivo*, etc. without an *allegro*, however, though it is not melancholy. There is a gradual ascent towards the high peaks of Michelangelo, Leonardo, and Giorgione and a gradual glissando towards the finale of Wincelmann. Yet the last essay on Wincelmann was in fact the earliest of Pater's writings on aesthetic theory and the climactic essay on *The School of Giorgione* was added later. Here he seems to have been writing about himself, for he suggests far more than he states in his unbrothered paragraphs. As a schoolboy I could only guess at what I failed to grasp; I was thrilled by the words I had to look up in the dictionary. On the other hand certain epithets - dainty, comely, quaint - recurred a touch too often for my taste.

The essay on Leonardo is assuredly the finest ever written about that genius, yet the repetition of "strange" on almost every page is a bit monotonous. True, Leonardo's manuscripts were written strangely from right to left and no doubt he offered to tell Ludovico Sforza "strange secrets in the art of war", but in his rhapsody about the Mona Lisa it seemed anachronistic to picture that lady "trafficking in strange webs with eastern merchants" like a tourist bargaining for carpets in an oriental souk. For all that Pater's style was magically effective. Dealing with art, it was suitably artificial. The style of James Joyce's *Ulysses* is equally artificial, though it is not concerned with art. Owing to Pater's *fin-de-siècle* style, one may realize the originality of his style, that sensuous flowing of an austere fellow of Brasenose College, Oxford. At present it is out of fashion, but so is that of George Moore, who wrote: "In the pages of Pater, the English language lies in state." However, *The Renaissance* went through some 23 editions after its publication in 1873.

In his essay on Botticelli, Pater expressed surprise that this artist was the only contemporary mentioned by name in Leonardo's treatise on painting. Was this due to chance, he wondered, or to deliberate judgment? Furthermore he asked: "Is a painter like Botticelli - a secondary painter, a proper subject for general criticism?" The pre-Raphaelites had begun to discover his charm. Ruskin had applauded him; and Swinburne had praised his drawings in the *Times* (in 1868); yet apparently Botticelli was still "comparatively unknown". It was Pater's lyrical essay that launched his vogue in late Victorian society - a vogue that was mocked by George du Maurier in *Punch*. Some 30 years later Bernard Berenson described Botticelli as "the greatest artist in linear design that Europe has ever had", and Herbert Horne's magisterial monograph, published in 1908, was dedicated to the Oxford don whose interpretation of the artist as a link between Christianity and Renaissance paganism stamped his image on succeeding generations. Pater's essay on Botticelli concludes: "He has the freshness, the uncertain and diffident promise, which belong to the earlier Renaissance itself, and make it perhaps the most interesting period in the history of the mind."

Now that art criticism is being swallowed by statistics and computer archives we need Pater to remind us that feeling and imagination are essential facets of an art critic's constitution. His importance for me was his message that "the principle of beauty in all things" is protean. We may find it in various ages and forms, in India, China and Egypt, as well as in Italy and Greece. Oscar Wilde paraphrased this when he wrote: "All beautiful things belong to the same age."

Sir Harold Acton is also the author of *Memoirs of an Aesthetic and The Soul's Gymnasium*.

Technical education in England in the early 1870s was weak and badly organized despite the efforts of the Government's Science and Art Department, which had been set up in 1853 to promote the spread of scientific instruction. The department's own syllabuses were widely condemned as too theoretical to be of direct use to industry, while many of those who supported its work openly argued that it was no part of their function to promote instruction related to specific trades or manufacturing processes.

It was in these unsatisfactory circumstances that some of the London Livery Companies began to turn their attention to the issue of technical education. Already concern was being expressed that the guilds, which had once been involved among other things with the apprenticeship and training of artisans, were no longer using their funds to fulfil that role. The view was put forth by William Gladstone in November 1875. "What was the object for which those companies are founded? Do you suppose they are founded for the purpose of having dinners once a year, once a quarter, or once a month? . . . Nothing of the kind. . . . These companies were founded for the purpose of developing the crafts, trades, or 'mysteries', as they were called," he said. And in a private conversation with the Lord Mayor of London he made it clear that in the long run he intended to find the necessary cash to promote technical instruction from what he regarded as the most appropriate source - the City of London Guilds.

As early as 1872 the masters and wardens of some of the leading companies had formed a committee to consider what contribution they could make to the growth of technical education, and a number of individual companies, including the clothworkers, were already making grants to technical institutions in the provinces. But it was not until November 1878 that the decision was finally taken to establish a specialist organization to coordinate these activities under the title of the City and Guilds of London Institute for the Advancement of Technical Education. Two years later it was formally incorporated under the 1862 Companies Act and in 1900 it received a Royal Charter in recognition of its pioneering work in the technical field.

Meanwhile the City and Guilds had set itself four prime objectives: to conduct a series of examinations in technical subjects (an ambition it began to realize from 1879); to promote trade schools in London and the provinces; to make grants to existing technical institutions; and finally to set up a central institution in London which would offer a new and more advanced level of technical education, along the lines offered by the polytechnics of Germany and Switzerland, and by the Massachusetts Institute of Technology in the United States.

It was opened at South Kensington in June 1884, with three quarters of its construction costs met by the City and Guilds itself. It aimed to cater for those intending to become either technical teachers or the leaders of industry. Some scholarships were to be offered but the organizing director, Philip Magnus, envisaged that most students would be "the sons of gentlemen". Day-time courses were arranged, to run for three years, and fees were set at £30 per annum. Entrance examinations were held of a standard equal to that of the London matriculation, though including fewer subjects, and there were three departments of study - civil and mechanical engineering, electrical engineering and chemical engineering, as well as a department of mathematics to serve the other three. Four professors were appointed - each eminent in his own field and each receiving a £1,000 a year, the substantial salary of 1887.

Day classes commenced in February 1885 with a mere six students, one of them a woman who gained a diploma in chemistry in 1887 and later became a teacher at the North London Collegiate School for Girls. Three of the other pioneers were also to gain the BSc degree of London University.

Nevertheless, despite this small beginning, the sixth annual report of the City and Guilds Institute proudly proclaimed the progress made. "In the first time, an institution which is comparable with, and in some respects superior to a German Polytechnic School. Erected at less than a third of the cost of the Technical High School at Berlin, it is replete with all the

Nuts and bolts of technical training

Pamela Horn traces the history of the City and Guilds of London Institute up to 1914



appliances for the education of technical teachers and of persons who are training with the view of becoming . . . Engineers, or Master Builders, or of taking the management of works in connection with any of our great Chemical and other manufacturing industries."

Such eulogies could not hide the fact, however, that support for the institution was slow in developing. By 1887-88 there were still only 122 day students in attendance, plus almost 500 studying in the evening on special courses. Soon statements began to appear in the press and elsewhere, claiming that the whole venture was a costly white elephant. One of the Livery Company leaders even claimed that it was being run "chiefly for the advantage of the professors", rather than the students - a charge the City and Guilds quickly refuted, declaring loftily that its aim was to provide "the scientific culture of the leaders of industry".

The *Times* also referred in the spring of 1887 to its "so-called meagre success", which it blamed on the inconvenient location at South Kensington and, more importantly, upon the stringent entrance examination, which had "a marked effect in keeping down the numbers". It called for standards to be lowered in an attempt to increase the institution's popularity. Philip Magnus, the City and Guilds organizing director, angrily replied that the main aim of the entrance examination was to raise the standard of science teaching in the public schools. He blamed the limited number of day students on general indifference towards advanced instruction in this sphere. "Of the need of higher scientific technical education Englishmen are not yet fully convinced," he wrote.

Over time, some of these teething troubles were overcome, with entrance requirements becoming less rigid, though still remaining above the level of those demanded by any other English university or university college. By 1894-95 the number of full-time students had reached 208, of whom 46 percent were on electrical engineering courses; 31.3 were involved with civil and mechanical engineering; 9.1 were studying chemistry; and the remainder were on "special" courses. But even at that stage criticisms continued, with an anonymous pamphlet circulating in the mid-1890s under the title "Is the Central College a Failure?" The charges of wasteful expenditure it raised and its inaccuracy were easily dealt with by the City and Guilds, but it is clear that concern was felt at the slow progress being made, especially compared to developments in Europe and the United States. In order to emphasize its educational and technical role more clearly, therefore, in 1893 its name was changed to the Central Technical College.

In the meantime, in academic circles the reputation of the Central was growing, particularly in the field of engineering. In 1900, following the reorganization of the University of London, it was appointed one of the

four schools of the newly created faculty of engineering. Seven years later, when Imperial College was set up, it became one of the three constituent colleges in that body, specializing in engineering. In the rationalization process which followed, its chemistry and mathematics departments were halved off to the Royal College of Science, another of the constituent colleges of Imperial. Those students already at the Central were allowed to complete their courses and by 1914, when the department was finally closed, only four degree students remained.

But in engineering, between 1903 and 1913 it retained a clear lead over all the other colleges of London University, providing 235 of the 520 internal degrees conferred by the university in that subject; 170 of these were at honours level, compared to 173 from all the other colleges of the university at this standard. Alongside that, the college continued its policy of awarding its own diploma, and in the year ending July 1913 there were 84 of these issued as well.

Nevertheless, if the Central College had achieved success in engineering by the end of the century, it had scarcely proved the trail blazing institution which its founders had envisaged. For there were several reasons. The first and most important was the continuing scepticism in British industry of the value of the courses it was offering, in indeed of higher education generally in the field of technology. There was still a firm belief in the value of "learning on the job".

Another problem was that "technical" education was thought of as something for the artisan rather than the captain of industry. Yet, the Central had aimed its courses at future management leaders.

Thirdly, its adoption of a broad "general" training did not find favour with those who preferred a more specialized approach. Thus every student had to follow a course in chemistry in their first year, whether they were intending to concentrate on chemistry or not, while each member of the chemistry department was expected to gain knowledge in mechanics and physics. Not all students saw the merit of this approach, and that, too, helped to keep numbers low.

Attempts to experiment with the length of course offered were limited by established university practice. Initially, a century before the four-year course for an engineering qualification of the highest order has been finally accepted, the professors of chemistry and electrical engineering at the Central were advocating just that. The former at least had been influenced by his experiences in the German educational system, but his arguments were rejected primarily because the three-year degree pattern was already firmly installed in Britain. It was, therefore, as a constituent part of Imperial that the Central (or the City and Guilds College of Engineering, as it became) was to achieve its greatest success.

As for the students, Philip Magnus had expressed the view in 1885 that after completing a three-year course at the Central and a further two years' apprenticeship in a workshop, the qualified man "would be ready to commence work at a salary of, say £150 per annum. How he progressed after that point would depend . . . entirely on himself". Among those who fulfilled Magnus's brighter hopes was H. A. Humphrey, who entered the mechanical engineering department in October 1885 and within a decade had become engineering manager for the major chemical company of Brunner Mond. He was elected the first Fellow of the City and Guilds in 1893 and during the First World War was largely responsible for the provision of explosives.

"Originally," as the historian of the City and Guilds points out, "the College had produced science teachers as the most urgent requirement, but it went on to provide trained personnel for direct service in industry at home and even more so abroad" - in India, Africa and the far flung corners of the Empire. Professor Armstrong, the first professor of chemistry, declared throughout the engineering world the diploma of the City and Guilds of London Institute is accepted as proof that the bearer's qualifications are unquestionable". No one disputed the truth of that assertion, either in his own day or later.

The author is a lecturer in economic and social history at Oxford Polytechnic.

Agriculture is a complex set of interrelated inventions. It is a necessary, but not of itself sufficient, condition for civilization. No gatherers, hunters or herdsmen ever made a civilization, even though hunting and stock-keeping may form peripheral components of one. Crops, in short, are central: man can live on them alone and many people in the world in fact do.

In the rich northern countries we tend to have lost sight of these notions. We use a substantial part of our agricultural resource in feeding stock, rather inefficiently: some 80-90 per cent of the food value of crops fed to stock is unavoidably wasted. Animals, as adjuncts to agriculture, have their uses (as scavengers, for draught, for special products such as wool and skins) but they are secondary.

As populations grow and press ever harder upon limited land and energy resources, so must our direct dependence upon crops, directly utilized as such, grow. Even in the rich north, an increasing dependence upon vegetable food and a decline in stock rearing seem certain. It can be done, as both history and modern experience show, and, under the inevitable demographic and economic pressures, no doubt it will be done.

My object is not to knock stock raising but simply to establish the fundamental importance, for civilization, indeed for survival, of crops. They are the crucial invention of agriculture. Without them, with only wild plants as objects, all the other inventions of digging, ploughing, hoeing, fertilizing and so on would be, at best, unrewarding.

Without the other, complementary inventions crops would be virtually useless because they are, in general, wholly dependent upon human care and skill for survival.

Crops and wild plants are different, even demonstrably related. Very few wild plants are any use in cultivation: Most are the wrong size or shape, they are poisonous, ill-tasting, prickly, non-hairy, or they shed their seeds or whatever. By contrast, their cultivated relatives have, in varying degree, the characters that the cultivator and consumer desire but the plants are lost in the wild; they are quite unfitted for normal survival.

Darwin and his contemporaries knew all this well enough and Darwin thought that cultivated plants and animals offered a sort of microcosm of natural evolution. He was, of course, quite right. Our cultivars have evolved by just the same processes that occur in the wild: development of genetic variation (which is omnipresent); genetic recombination, giving new variants; selection, implying not death-or-survival but, rather, differential reproduction of the favoured variants; and isolation of the products, so that the new variants breed true (or true enough), minimally contaminated by genetic material from their less favoured predecessors.

But there is one difference: to Darwinian natural selection has been added artificial or human selection and also semi-natural selection inherent in the agricultural environment.

We can add one other element, unknown to science in Darwin's time, namely polyploidy. All animals and many plants are diploid: they have two sets of chromosomes. Many other plants are polyploid, having four, six, eight (sometimes three, five, seven) sets of chromosomes. Polyploidy, as has been known now for some 60 years, is an important evolutionary resource among plants, permitting the immediate stabilization of interspecific hybrids (vegetable mules, one might say) that would otherwise have failed to survive and breed. Polyploidy provides the odd, rare chance of (more or less) "instant speciation" and it has had a role in the evolution of both wild and cultivated plants.

To fill out these generalizations, I consider a few examples. The wild wheats are winter-annual weedy grasses of semi-arid places in the near east, many diploids with 14 chromosomes and shattering seed-heads: the cultivated wheats are distributed over a huge range of environments from the subtropics to the tropics; they are shorter and have tough, threshable heads with a higher ratio of grain to straw; some are tetraploid (4 x 7 = 28 chromosomes), some hexaploid (6 x 7 = 42 chromosomes).

Nearly the same could be said of the barleys except that here, polyploidy has not intervened and the cultivars remain diploid and perfectly crossable with their ancestors, the wild barleys. The wild potatoes are diploid plants

Sowing the seeds of change

Norman Simmonds on the evolution of crop plants

Top: maize breeders at work in Iowa, USA. Hybrid maize is one of the many spectacular successes of plant breeding. Right: the wild source of a crop. Two species of bananas growing as "jungle breads" in secondary bush in Malaysia



of the high Andes, weedy (like the wheats) but perennial, with long tubers (stolons) and bumpy, ugly little tubers that are bitter to the taste, toxic if eaten in moderation and lethal if eaten in quantity. Their cultivated descendants are mostly tetraploid, with neat clusters of smooth, shapely, large and highly nutritious tubers. Biologically it is one of the most efficient of all our crops (as Frederick the Great and the captains of the Industrial Revolution recognized) and it is grown from high latitudes down to the tropics at middle elevations.

Maize, like barley, remained a diploid (with 2 x 10 = 20 chromosomes) but so changed is it that we are not even certain what its ancestor was: probably something like the contemporary tocinato (*Euchlaena*) of Central America, a tillering grass with an open, terminal inflorescence and small husked seeds, quite unlike maize, with its single stalk, its huge lateral cob and large naked seeds. From its origin in the neotropics at middle altitudes, maize is now grown nearly everywhere that agriculture is practised but reaches by far its greatest importance as a temperate-summer crop.

These examples (which are chosen but are quite characteristic) must suffice to make the point. Crops are profoundly altered from wild plants in genetic constitution and the alterations are reflected in the ecology and morphology of the plants and the chemistry and edibility of the products, changes which collectively adapt the plants to the requirements of farmer and consumer. And, to repeat a point made above, the processes of crop evolution were (and are) neo-Darwinian evolution on the micro-scale.

The general principles just outlined are universal, which is why I treated them first. The details, crop by crop (so far as we know them) vary very greatly, which is hardly surprising because crops are diverse. There are about 250,000 higher plant species (depending on interests and definitions) of which about 100 are economically significant (vegetable mules, one might say) that would otherwise have failed to survive and breed. Polyploidy provides the odd, rare chance of (more or less) "instant speciation" and it has had a role in the evolution of both wild and cultivated plants.

To fill out these generalizations, I consider a few examples. The wild wheats are winter-annual weedy grasses of semi-arid places in the near east, many diploids with 14 chromosomes and shattering seed-heads: the cultivated wheats are distributed over a huge range of environments from the subtropics to the tropics; they are shorter and have tough, threshable heads with a higher ratio of grain to straw; some are tetraploid (4 x 7 = 28 chromosomes), some hexaploid (6 x 7 = 42 chromosomes).

Nearly the same could be said of the barleys except that here, polyploidy has not intervened and the cultivars remain diploid and perfectly crossable with their ancestors, the wild barleys. The wild potatoes are diploid plants

not yet been pushed hard enough to become greatly changed in cultivation, what of the 250,000 or so wild species which have never been cultivated at all? Very many valuable plants await only imagination and energy to turn them into crops.

Consider rubber (*Hevea*) and the African oil palm (*Elaeis*), both major crops: a century ago they were wild plants in, respectively, Amazonas and tropical west Africa, gathered but uncultivated. The economic pull of tyres and margarine brought them out and a mere 100 years of competent agricultural research was enough to convert them into highly efficient cultivars. There must be thousands of other species of like potential (especially perhaps of oil plants and casava). Indeed a number have been recognized but the human effort that goes into developing new crops is pathetic in relation to both the potential and to the rate of destruction of the natural sources. Hence the importance, now at least dimly recognized, of genetic resource conservation. All is not yet lost but an awful lot surely will be.

The oldest known domestications are of barleys, wheats flax and peas in the area around the eastern Mediterranean and eastwards of it. These can be dated on archaeological evidence, from about 9000 BC and it is clear that settled cultivations and crops here emerged together, each dependent on the other. Rice in the Indo-Chinese region and maize, beans and cucurbits in tropical America emerged, on present evidence, a little later. But archaeology may well push these dates back and it is a fair assumption that settled agriculture and therefore crop domestication were more or less contemporaneous in several widely separated sites.

Forty years ago, there was a general view that crops evolved in a limited number of "centres of origin"; that view has gone, replaced by a diffuse-continuum view, with crops originating and evolving everywhere that agriculture is practised - which means virtually everywhere except extreme deserts, mountains and tundra.

This view, of course, by no means abandons the notion that each crop has its own history, referable ultimately to a particular area of the world: bananas, sugar cane and coconuts undoubtedly came from South East Asia; the yams originated as cultivars in tropical Asia, Africa and America independently; some cottons are Afro-Asian, others are tropical American; cassava, groundnuts and pineapples are lowland tropical American; while the oil palm and rubber referred to above are east African; and so on.

The continuum view of place of origin is matched by a similar view of time scale. Some crops are ancient, others are suspected also to be so; others, again, are known to be recent (eg the sweeds, which originated in Europe about 200-300 years ago and the oil palm and rubber referred to above); others, too, are only now being domesticated or yet await doing. New origins, indeed, have been con-

these processes can still be seen in tropical peasant agricultures, though long since gone from our technology-based agriculture.

With us, the intuitive or unconscious evolutionary activities of the small farm have been replaced by the science-based activities of the professional plant breeder. Plant breeding is not a science; it is a science-based technology and a highly effective one, too. The plant breeder can be thought of as an applied evolutionist and, in his hands, our crops are probably improving (plant breeding is a wholly benign technology) faster than even before.

But many of the major steps were taken millennia before plant breeding was heard of and the peasant and plant breeder are both evolutionists: their activities are not fundamentally different, even though the latter can call on genetics and diverse other sciences to help him to accelerate progress. The answer to who did it and how is, therefore, simply: all sorts of people from small farmers to professors. And their methods are fundamentally evolutionary.

Our crops will go on evolving, increasingly in the hands of professionals rather than of peasants, as technology-based agriculture spreads. New crops will be developed, some old ones will disappear; the cultivars of decades hence will be different from those of today (as contemporary cultivars in Europe are mostly different from those of 50 years ago). Some people will regret the spread of technology-based agricultures among what are now peasant societies. But one does not have to be too devoted to the "technological fix" to recognize that the only chance that those peasants' descendants will have of eating adequately lies in the sensible application of agricultural research: research on the crop's environment and upon the genetic structure of the crop itself. In the contemporary phase of crop evolution, in the hands of the plant breeders, lies a substantial part of such chance as we have of averting starvation for a great many people.

The author recently retired from the Edinburgh School of Agriculture. He is an honorary professor in the University of Edinburgh.

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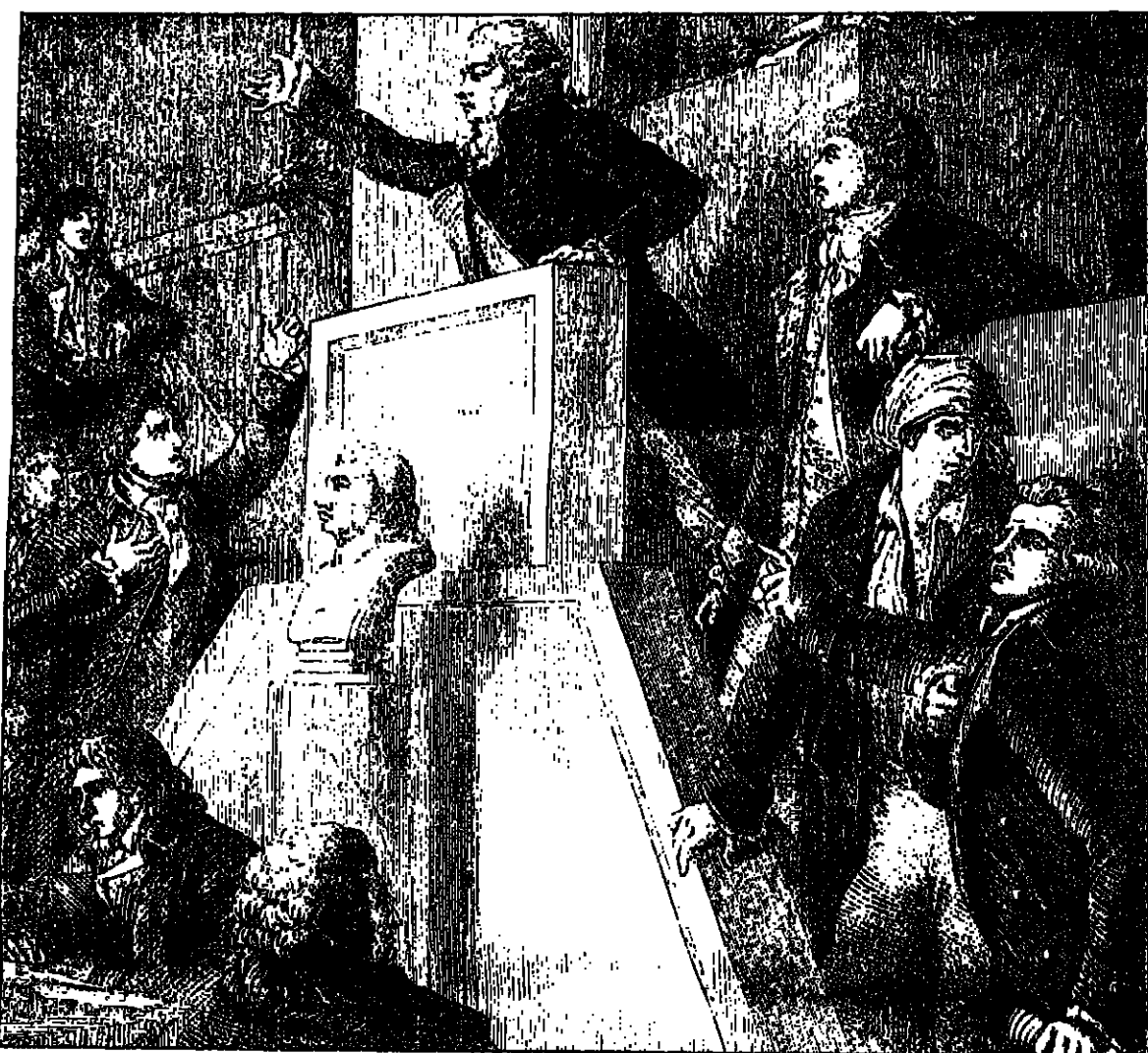
The mental world of revolution

by William Doyle

Will and Circumstances: Montesquieu, Rousseau and the French Revolution
by Norman Hampson
Duckworth, £19.50
ISBN 0715616978

Norman Hampson must be one of the most influential historians of his generation. If we want to learn about our own national history we can choose from an impressive range of reliable introductions to almost any period that interests us. Nobody can claim to have written the obvious book. But if our interests lie abroad there is far less choice, and here Norman Hampson can claim to have written *two* of the obvious books.

Those of us who took our finals in 1964 were fortunate that his *Social History of the French Revolution* had appeared the previous autumn. It became our bible, and after twenty years it is still perhaps the best introduction in any language. That is why it has been translated into Italian, Spanish and Portuguese. Then in 1968 he produced his Pelican volume on *The Enlightenment*, and no longer were students forced to grapple with the floridities of Paul Hazard or the tortuous ponderousness of Ernst Cassirer in the search for an introduction to eighteenth-century thought. Not surprisingly, this too has been widely translated, even into French. As they advance in their study of the eighteenth century, students will no doubt continue to fall under the spell of Alfred Cobban's iconoclasm, Peter Gay's or Robert Palmer's syntheses, or Richard Cobb's style. But half the world these days makes its first acquaintance with the Enlightenment and the French Revolution through the eyes of Norman Hampson.



A meeting of the National Assembly.

the first of eighteen volumes in the John Rylands Library in Manchester with the unpromising title of *Recueil des pièces intéressantes pour servir à l'histoire de la Révolution en France*.

This is an important collection of pamphlets which throws particular light on the intellectual atmosphere of the so-called "pre-revolution". What Hampson found was that the authors of these pamphlets were saturated in Montesquieu and Rousseau. They may not have understood the subtleties of their thought. They often completely overlooked the contradictions between them. But they spoke their words, adopted their concepts, and appealed to their authority at every turn. Any account of the French Revolution which took no account of this mental world upon which the crisis was to break would never get to the heart of matters. This was the message of an article buried in the worthy but obscure pages of the *Bulletin* of the John Rylands Library in 1964.

Few people seem to have read it; and although the message was repeated in broader terms in the opening chapter of *The First European Revolution* (1969) nobody seems to have asked if this was still the Hampson of the *Social History*. Nor did his next two books offer many clues to his changing preoccupations. *The Life and Opinions of Maximilien Robespierre* (1974), his most brilliant and original work, was as much about the problems of writing history and biography as about Robespierre. Here indeed was a man of ostentatious intellectual convictions, and few would deny that they mattered desperately to thousands of Frenchmen who suffered their consequences in the Year II. But maybe he was a special case; whether you think him a lonely ideological fanatic or the incorruptible guarantor of national purity, he was *not* generic, and typified nothing. Then with *Danton* (1978) Hampson took on a character who emerged from his portrait with no obvious convictions at all – a slippery machine politician who could snuff power from any distance and would profess any belief that seemed advantageous at the time. Nevertheless, contributions to recent *Festschriften* showed that the biographer was still fascinated by the intellectual history of the revolution; and his contribution to *The Enlightenment in National Context* (1981) offered

a full-scale trailer for the new book.

As in all his works, he disclaims any pretension to have identified the revolution's essentials. But since "the most superficial glance at what was being written in the 1780s showed that everyone drew his inspiration from Montesquieu or Rousseau or, more often, from both" (page viii) the question of where this inspiration led later revolutionaries is evidently a fundamental one. He begins with a brief epitome of the political thought of Montesquieu and Rousseau. Montesquieu, whom he clearly loves for his moderation, hesitations and endearing inconsistencies, is the prophet of circumstance. Political arrangements have to obey the moral law, but chiefly they have to be appropriate to the society for which they are devised. Rousseau is the prophet of will: of course political arrangements have to be appropriate, but men can change what makes them appropriate in accordance with the dictates of the moral law. Hampson does not love Rousseau, but he can see why men of the eighteenth century were inspired by him, and cannot help admiring his literary powers.

It is this sympathetic imagination that distinguishes his analysis from the otherwise very similar approach of J. L. Talmon. Talmon's great polemic against political messianism in the revolution, *The Origins of Totalitarian Democracy*, has sold well since its first appearance 31 years ago, despite the scorn of historians convinced that ideas influenced nobody unless they were rationalizations of deeper social forces. This is a tribute to the public's common sense, a quality always evident in Norman Hampson's writings too. And although he is not concerned, as Talmon was, to blame the evils of our own day on eighteenth-century theorists, he shows the same conviction that ideas influence men for intellectual reasons, and do affect the way they react to their circumstances. *Will and Circumstances* is about how men steeped in Montesquieu and Rousseau reacted to the dizzy extraordinary circumstances of the 1790s.

Most men are beyond the historian's reach. But a few wrote, or said, enough both before and during the revolution for the development of their attitudes to be clearly plotted. The first half of

no question of unscrambling what had been achieved. In this situation Montesquieu offered little guidance about what to do. Rousseau, on the other hand, had a prescription that suited everybody: consult the general will. But since the general will was not the same as the will of all, or even of the majority, this prescription was a licence to discount any viewpoint opposed to one's own. And since the viewpoint of revolutionary politicians depended often on whether they were in office or not, they found themselves ascribing to the general will at one moment what they declared was totally against it at another. This is graphically illustrated in an appendix where Hampson juxtaposes similar quotations from Brissot and Robespierre on a whole range of central revolutionary issues. Most historiography has portrayed these two as sworn ideological enemies. Now we are reminded that, thanks to their common intellectual background, they reacted to political circumstances in much the same terms. What always divided them was power rather than principle.

The strength of this book is that the author has carefully read all the writings of the men he is studying. He knows what they said, and is not content to repeat what others have said they said. Most historians, confronted by the acres of windy and repetitive rhetoric favoured by the French revolutionaries, are only too glad to accept the selective quotations served up by partial interpreters. As a result they are usually ready to believe that the actors in this great drama were more consistent than they were, or could even hope to be. This is not to say that they scorned consistency. Robespierre and Saint-Just in particular went to elaborate lengths to rescue fixed principles from the surging tides of political exigencies. But they could not do it without lethal mental acrobatics, and the virtue of a textually comprehensive approach like this one is to underline just how acrobatic they really were. The only one among Hampson's sample who remained remotely near consistency was Marat. This is because he was a half-mad charlatan who never got within reach of political power. Long-overdue doubt is even thrown on Marat's supposed influence.

He himself, after all, was always claiming that nobody listened to him, and perhaps nobody in power did until he was taken up as a martyr to Girondin vindictiveness in the spring of 1793, only weeks before his martyrdom became real rather than metaphorical. Marat's true contribution to the revolution lay not in his ideas but in his style. Among men given readily to hyperbole, he outdid them all. His consistency lay in outbidding the competition; as he told Robespierre, his influence depended on his vehemence. But what he expressed so vehemently and ferociously was something that all the characters analysed here believed, and had imbibed largely from Rousseau. Politics was about morality, and republican politics were about virtue. Those who believed themselves true republicans therefore believed they embodied virtue, and this justified any measures they thought necessary against their opponents. Thus conscience made tyrants of them all.

This was also, of course, the view of Talmon. He deplored the French revolutionaries as the first exemplars of tyrannical doublethink. Those who reject him because he condemned revolutionary heroes will reject Hampson too, and shake their heads at his abandonment of social history. But those who want to know what Marat, Brissot and Marpays wrote will find these pages a fair introduction. Robespierre and Saint-Just need none, and nobody with an open mind will find the treatment of them less than stimulating. A debate has been reopened; and by a historian of the highest credentials. This alone ensures that his ideas will not be shrugged off the way Talmon's were.

William Doyle is professor of modern history at the University of Nottingham.

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edited by Anthony Giddens and Gavin MacKenzie
Cambridge University Press, £20.00 and £6.50
ISBN 0-521-24597-4 and 28809-6

In *The Development of the Labour Process in Capitalist Societies* Craig Littler soberly reassesses the bundle of ideas about the transformation of the division of labour which have been the leitmotif of the lively debate following Henry Braverman's *Labor and Monopoly Capital*. He presents a shrewd and originally researched account of the historical development of labour control in late nineteenth and early twentieth-century Britain; an interesting if cursory comparative look at Japan and the USA; and above all a highly thoughtful analysis.

He makes imaginative use of Weberian bureaucracy theory to criticize Braverman for confusing changes in work with the rationalization of organizations, and he demonstrates how many other writers on the labour process have conflated several quite separate dimensions within the notion of skill. This is a necessary corrective to recent glib generalizations about changes in the control and organization of work.

Several of the contributions to Giddens and MacKenzie's book similarly reflect the scepticism which has inevitably followed the acclaim accorded to Braverman's work. This volume is a testimonial to mark the retirement from his chair in sociology at the University of Leicester of Ilva Neustadt. All the contributors have at some time been members of his department, and the book is a useful reminder of the strength of Leicester sociology.

Neustadt's main interest is in the division of labour and its relationship to social class, an area centrally involved in the labour process debate. One of the main criticisms made here, as by Littler, of this literature is its neglect of the scope for an active response by workers. Both the editors make this point in their own papers, and Graeme Salaman draws attention to the fact that Braverman treats managers as well as workers as automata.

After the determinism of structuralist theory a new emphasis on actors' scope for action is emerging, though founded not as previously on an obsession with consciousness but on a realistic appraisal of the scope for autonomy left by spaces in social structures. Giddens does a particularly good job here, considering the possibilities open even to almost powerless groups. David Lockwood's contribution, while not contradicting this logic, provides an equally interesting counterweight. Picking up that famous footnote in Durkheim's *Suicide* about fatalism, he considers the importance of the sheer immovable weight of existing institutions as a constraint on incipient disorder. Potentially, he says, this provides the basis for a theory of order different from that rooted in value consensus that became Durkheim's chief legacy.

Determinist theories of class location developed by structuralist Marxists also receive short shrift in this volume. As emerges from MacKenzie's witty but substantial paper, the occupational categories currently growing most rapidly are those which the theorists have most difficulty determining. This has indeed become a problem for all class theories. No general theory emerges from this book, but several authors help lay the foundations for a future one. Richard Brown draws together the threads of recent research, adding several of his own, which demonstrate the relevance of individuals' work histories, a dimension overlooked by conventional synchronic class analysis. John Goldthorpe provides a valuable account of the distinctive position of his unfortunately named "service class". Sheila Allen ventilates the single biggest problem of class analysis: the failure to accommodate women. But it really is time the writers on this topic went beyond merely complaining about its neglect.

Away from this central question of identifying class boundaries, other contributors to this meaty volume tackle different major issues. John Scott provides an excellent analysis of power and property in corporations. Geoffrey Ingham demonstrates that the "problem" of the City of London has been, not so much its overseas preoccupations, as its commercial orientation. Terry Johnson's account of the role of the state, especially the imperial state, in the development of the English professions must rank as the most original contribution on the professions for some time. And Paul Hirst displays more good sense and realism on incomes policy than anyone currently contributing to national political debate.

Colin Crouch
Colin Crouch is reader in sociology at the London School of Economics.

Means of control

Managerial Prerogative and the Question of Control
by John Storey
Routledge & Kegan Paul, £7.95
ISBN 0 7100 9203 2

For many industrial sociologists both in Europe and the United States, Harry Braverman's *Labor and Monopoly Capital* established the research agenda for the 1970s.

Building upon Marx's thesis that the development of capitalism would be associated with a shift from the formal to the real subordination of labour, Braverman claimed to have revealed the inner logic of managerial strategies. The specific ways in which class struggle accounts for the varied forms of managerial control and the explanation of the different forms of such struggle takes are left unelaborated. Explanatory theory gives way to non-comparative historical narrative and to mere descriptions of the shifting frontier of control. Presumably the real work in constructing a theory of the labour process is only just beginning.

John Storey has given us what is in effect a survey of the present state of play in the Braverman debate. While there is not perhaps a great deal that will surprise specialists in the field, he has synthesized ably the literature in a form that is accessible to students and he dissects in a clear way some of the false assumptions upon which Braverman's analysis rested.

After emphasizing the need to take account of the way in which managerial control strategies may be affected by the wider economic and political environment, Storey turns to the central point of his discussion – Braverman's conception of managerial strategies of control. In the first place, he points out that the empirical evidence casts doubt on whether management thinking in this sphere is sufficiently coherent even to merit description as a strategy. Second, and most critically, he argues that empirical studies of modes of control reveal not the growing dominance of any one system of control but rather the co-existence of very varied systems. Braverman, then, adopted an over-rational image of management and he uncritically accepted the precepts of Taylorism – with their emphasis on the simplification, deskilling and tighter direct supervision of work – as a guide to the way in which management effectively operated. In reality, modes of control range from cases that approximate to the model of Taylorism to very different systems in which control is exercised more subtly through "human relations" strategies, the development of quasi-autonomous work groups, or the building in of control into the very design of the technology.

Storey is sceptical about the possibility

that any one mode will ultimately prevail. Control strategies, he suggests, are bedevilled by the fact that they must cope with an inherent conflict in management objectives. Capitalist employers want a more submissive and predictable workforce, but, at the same time, they require workers to use their initiative.

Much of Storey's argument here involves an implicit and long-due appeal to explore the relevance for labour process theory of the earlier tradition of industrial sociology. In the highly segmented sociological world of the early and mid-1970s, it is perhaps unsurprising that Marxist scholars felt that they needed to start afresh and consign the past literature to the dustbin – sometimes with indifference and sometimes with outright contempt. Yet such sectarianism has proved costly. For a significant part of the work of labour process scholars in the 1970s involved the rediscovery of facts about industrial organization that had been common knowledge to industrial sociologists in the 1950s and 1960s. As Storey correctly perceives, the issue of managerial control lay at the core of the work of authors as diverse in their theoretical orientations as Gouldner and Woodward. The attempt to develop a theory of control while ignoring the careful descriptions in the literature of its diverse forms can only be described as half-baked.

But now that the "one best way" has finally been replaced by the rediscovery of the diversity of forms of managerial control, where, one wonders, does this leave the theory of the labour process? In practice, Storey's critical destruction of Braverman is not accompanied by much in the way of an alternative theory. He promises to explain developments in managerial control strategies "by having recourse to a dialectical approach". Leaving aside the problem that the theoretical aspart from the terminological distinctiveness of "dialectical approach" continues to elude me, what is clear is that it leads to few concrete explanatory propositions. We are simply pointed in the general direction of class struggle. The specific ways in which class struggle accounts for the varied forms of managerial control and the explanation of the different forms of such struggle takes are left unelaborated. Explanatory theory gives way to non-comparative historical narrative and to mere descriptions of the shifting frontier of control. Presumably the real work in constructing a theory of the labour process is only just beginning.

Duncan Gallie
Duncan Gallie is reader in sociology at the University of Warwick.

Solidarity

The Analysis of a Social Movement: Poland 1980-1981
ALAIN TOURAINE
with FRANÇOIS DUBET, MICHEL WIEWORKA and JAN TRZÉBIELECKI

A unique analysis of the Solidarity movement. Touraine and his team of researchers involved groups of Solidarity workers in a discourse over the nature and aims of their political and economic struggle: what emerges is a record of exceptional value in understanding the movement which transformed Polish society.

Co-publication with the Melsion des Sciences de l'Homme, Paris

The Kula

New Perspectives on Massim Exchange
Edited by JERRY W. LEACH and SIR EDMUND LEACH

These essays, which address the questions of how the Kula exchange system works and why people engage in it, are designed to provide fresh impetus to the analysis of a classic institution in exchange theory and in the cross-cultural study of mankind.

The Kula: A Bibliography

Edited by MARTHA MACINTYRE

This comprehensive bibliography, containing over six hundred references to works relating to the Kula, traces the development of anthropological thinking about the institution since the 1920s.

Law of disputes

Picketing: Industrial disputes, tactics and the law
by Peggy Kahn, Norman Lewis, Rowland Livock and Paul Wiles
Routledge & Kegan Paul, £5.95
ISBN 0 7100 9534 1

The aim of this book is to assess the impact of some of the provisions of the Employment Act 1980 on the conduct of industrial action during the first two years it has been in force.

In particular, it is concerned with the sections which narrow the scope of lawful picketing and outlaw certain forms of secondary action. This is not, however, a legal text, and the account of the 1980 Act is intentionally simplified – perhaps too much so. At present, a general reader may fail to appreciate that the "technicalities" of section 17 greatly limit the scope of the Act's prohibition of secondary action.

The authors endeavour to place the legislation in "the larger social environment in which it was supposed to operate". There are chapters on the rise of monetarism and neo-liberal political philosophy as well as the history and nature of British labour law. In chapter four, the writers accept Kahn Freund's contention that there is an inevitable conflict between the interests of capital and labour. Consequently, mechanisms exist within industry whereby such conflicts can be "routinized". Only when either side goes beyond the settled tactics for waging disputes in a particular industry, does the "normalization" of industrial conflict break down. A major thesis of the book is that these tactics depend on the nature of production in the particular industry concerned, the degree of specialization and distribution of skills of the workforce and the relative strengths of management and unions. It therefore follows that

in some industries, for example, the water workers, secondary action is not necessary for effective tactics while in others, like engineering, secondary action in the form of blacking is essential.

In the second part of the book the authors examine in detail industrial disputes in South Yorkshire and Humberside in various sectors of the economy. This empirical research not only illustrates the thesis in chapter four but also suggests that the impact

of the 1980 Act is limited. As the Act's provisions are not understood, they are generally not taken into account by trade unionists: economic factors are far more important than legal issues. If the only effective industrial action available involves a breach of the Employment Act, then if a union felt strong enough (the National Union of Mineworkers, for example) it would take the action regardless of the legal consequences – particularly as the employer must instigate civil proceedings and no breach of the criminal law is involved. However, the Government's economic policies have weakened some unions' social power and industrial action has generally declined. But it does appear that the 1980 Act has strengthened employers psychologically. This was necessary: "free collective bargaining" presupposes a bargaining process, not capitulation to trade unions' demands.

The chapter on the police and picketing is excellent. The vast majority of pickets consist of small numbers of employees picketing their employer's enterprise. Regardless of the statutory definition of lawful picketing, the police regard such pickets as "normal" and policing is minimal. If, however, a picket becomes "abnormal", (if outsiders appear on the picket line or mass picketing occurs) suggestions from the police become firm instructions and arrests can occur. But even here, the police endeavour to contain any trouble and so maintain their policy of impartial policing of industrial disputes.

The authors hope that they "have, in some small way, chartered new ground in the sociology of law". By providing evidence which confirms the prima facie "common sense" hypothesis that industrial tactics differ according to the nature of the industry and the parties concerned, the book fulfils the writers' modest aims. But whether the current employment legislation will continue to have so little impact on the conduct of industrial relations remains to be seen.

J. M. THOMSON

J. M. Thomson is lecturer in law at King's College London.

A second, revised edition of *Understanding Industrial Relations* by David Farnham and John Pimlott has been published by Cassell at £8.95. The new edition attempts to take account of the changes in trade union power and employment law since the book first appeared in 1979.

Traders without Trade

Response to Change in Two Dyula Communities
ROBERT LAUNAY

For centuries before the advent of colonial rule the Dyula of the Ivory Coast enjoyed a virtual monopoly as local traders. This book describes two Dyula communities in the pre-colonial period and then focuses on two related problems: it examines the way they have adapted to the loss of their trade caused by the impact of colonialism, and their integration into modern town.

Cambridge Studies in Social Anthropology 42

Other Tribes, Other Scribes

Symbolic Anthropology in the Comparative Study of Cultures, Histories, Religions and Texts
JAMES A. BOON

This book investigates the history, dialectics and current practice of the symbolic analysis of cultural diversity. Its aim is to formulate a general comparative approach to the study of symbolic processes, integrating the major different theories about symbolic forms which have been developed by other writers.

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Rank and Rivalry

The Politics of Inequality in Rural West Bengal
MARVIN DAVIS

The author develops a novel perspective on hierarchy and politics in rural Bengal. He uses indigenous concepts to posit a challenging new "transformational" theory of social rank, arguing that status groups in India are not static but in a constant flux, and offering an original interpretation of the role of the individual in this.

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Cambridge Studies in Cultural Systems

CAMBRIDGE UNIVERSITY PRESS

C. J. R. Sheppard is a fellow Pembroke College, Oxford.

Universities continued

UNIVERSITY OF THE WEST INDIES - JAMAICA

Applications are invited from suitably qualified candidates for the following posts:

PROFESSOR OF LIBRARY STUDIES
Successful applicant will be required to teach at first degree and postgraduate diploma levels and will be expected to have a research orientation and interest in postgraduate work.

PROFESSOR/SENIOR LECTURER IN APPLIED PHYSICS
Appointment to be made in the field of Electronics or Materials Science. Successful applicant expected to continue to shape and teach undergraduate as well as graduate courses and to lead in the further development of research in the area of Electronics/Materials Science. Industrial experience an advantage. If appointment made at Professorial level in field of Electronics, emoluments will be supplemented by grant(s) of at least J\$30,000 over a three year period in the first instance, and successful applicant will be expected to establish contact with organisations outside the University in order to develop teaching programmes aimed to the needs of industry and play a role in development of local electrical industries. Duties to be assumed by 1 October, 1983 or as soon as possible thereafter.

SENIOR LECTURER/LECTURER AND LECTURER/ASSISTANT LECTURER IN PHYSICAL CHEMISTRY
Successful applicants will be expected to play a major role in teaching and organising courses in the Department and to contribute to the research programme.

SENIOR LECTURER/LECTURER IN COMPUTING, DEPARTMENT OF MATHEMATICS
Preference will be given to applicants with interest and experience in Business Information Systems and in Data Processing, but applicants specialising in other areas of Computing Science will also be considered.

SENIOR LECTURER/LECTURER IN TELEVISION PRODUCTION, CARIBBEAN INSTITUTE OF MASS COMMUNICATIONS (CARIMAC)
Successful applicant will be responsible for teaching all aspects of television production (including theory, editing, editing) at beginning and advanced levels in Diploma and degree programmes. Applicants should have appropriate University degree and/or practical professional experience in the field.

LIBRARIAN III/ASSISTANT LIBRARIAN
Applicants must either be graduates with appropriate professional qualifications or Fellows of the Library Association (or equivalent). Level of appointment will be dependent on experience. Successful applicant will be expected to work in the main in the Cataloguing Section of the Library. Experience with the Library of Congress Classification (AACR2), automated cataloguing systems including online cataloguing would be an advantage.

Salary Scales (1982/83):

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J\$21,477-J\$27,854
Non-pensionable allowance
LECTURER & LIBRARIAN III
J\$15,595-J\$17,848
Non-pensionable allowance
ASSISTANT LECTURER & ASSISTANT LIBRARIAN
J\$11,104-J\$17,048
Non-pensionable allowance
SENIOR LECTURER
J\$20,423-J\$27,847
Non-pensionable allowance
LECTURER & LIBRARIAN III
J\$15,595-J\$17,848
Non-pensionable allowance
ASSISTANT LECTURER & ASSISTANT LIBRARIAN
J\$11,104-J\$17,048
Non-pensionable allowance:
(£1 Sterling = J\$2.85)

FSRU Study and Travel Grant. Unfurnished accommodation or housing allowance. Up to five (5) full economy passages on appointment and on normal termination. Detailed applications (three copies) with curriculum vitae and naming three referees should be sent as soon as possible to the Registrar, UWI, Kingston 7, Jamaica. Applicants resident in the UK should also send one copy to the Overseas Educational Appointments Department, The British Council, 90/91 Tottenham Court Road, London W1P 0DT quoting reference U107-U112/83. Further details are available from either source.

The Middlesex Hospital Medical School (University of London) Applications are invited for the post of SECRETARY OF THE MEDICAL SCHOOL available from 1 August 1983

The post will also include a role in the Joint School comprising The Middlesex Hospital Medical School, The Faculties of Medical and Clinical Sciences of University College, London and the Postgraduate Institutes of Laryngology and Otolaryngology, and of Otorhinolaryngology and of Urology.
Salary: from £17,275 to £21,188 per annum London Allowance included.
Further particulars are available from the Dean to whom all enquiries should be addressed. Applications in writing with full curriculum vitae by first post, 31 July 1983 to The Dean, The Middlesex Hospital Medical School, London W1P 7PN.

University of Oxford ASSISTANT CHIEF ACCOUNTANT

Applications are invited from suitably qualified candidates for the post of Assistant Chief Accountant. The successful candidate will be responsible for the day-to-day running of the University's financial affairs and will be expected to have a research orientation and interest in postgraduate work.

Further particulars are available from the Dean to whom all enquiries should be addressed. Applications in writing with full curriculum vitae by first post, 31 July 1983 to The Dean, The Middlesex Hospital Medical School, London W1P 7PN.

The University of Sheffield CHAIRMAN OF LANDSCAPE ARCHITECTURE

Applications are invited from suitably qualified candidates for the post of Chairman of Landscape Architecture. The successful candidate will be responsible for the day-to-day running of the University's financial affairs and will be expected to have a research orientation and interest in postgraduate work.

UNIVERSITY OF THE SOUTH PACIFIC Applications are invited for the following posts: LECTURER IN BIOLOGY (83/42)

Candidates should normally have a PhD degree and experience in University teaching. Candidates will be considered from any area of Plant Biology, but an interest in marine biology and/or environmental physiology could be an advantage. They should have wide interests in Biology and be prepared to contribute to teaching at all levels in a range of areas outside their speciality. Candidates able to obtain secondment for a contract period will be considered. Appointment will be for a contract period of three years in the first instance.

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The successful applicants should have good postgraduate qualifications and a proven record of teaching and research experience and would be expected to develop and teach courses in the general area of economics. One of the posts requires academic ability to teach Microeconomics and, possibly, History of Economic Thought. It is expected that the applicants will be available to take up their appointments on or before 1st February, 1984. One appointment will be for a contract period of three years and the other for a one-year period.

Salary Scales: Senior Lecturer: F\$15,740-F\$18,487
Lecturer: F\$10,892-F\$15,245
(£1 sterling = F\$1.8225)

In addition the University provides gratuity amounting to 15% of basic salary, appointment allowance and, subject to the University's current housing policy, partly furnished accommodation at a rental of 12 1/2% of salary. The University will pay an allowance in lieu of superannuation of 10% of standard salary. In some cases this allowance may be paid direct to the appointee's existing superannuation scheme subject to a declaration of acceptability of the scheme by the Commissioner of Inland Revenue.

The University has a small number of positions within the establishment for which the British Government provides supplementation payments (BESS). These present posts carry no such benefits and are offered on local terms and conditions only.

Candidates should send three (3) copies of their curriculum vitae with full personal particulars, names and addresses of three referees and date of availability to the Registrar, The University of the South Pacific, PO Box 1188, Suva, Fiji, to reach him no later than 22nd July, 1983. Applicants resident in the UK should also send one copy to the Overseas Educational Appointments Department, The British Council, 90/91 Tottenham Court Road, London, W1P 0DT quoting reference U105-U108/83.

Further details available from either address.



School of Modern Languages

Applications are invited for a temporary Lecturer in French. The successful candidate will be expected to teach French in the first two years of the BA programme and to be available to teach French in the first two years of the BA programme. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

Further particulars may be obtained from Mrs E. C. P. Sears, School of Modern Languages, University, Southampton SO9 5NH to whom applications (seven copies) with curriculum vitae and three referees should be sent, not later than 8th July, 1983.

The Queen's University Belfast

LECTURERSHIP IN FRENCH

Applications are invited for a temporary Lecturer in French. The successful candidate will be expected to teach French in the first two years of the BA programme and to be available to teach French in the first two years of the BA programme. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

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The Papua New Guinea University of Technology Department of Accountancy and Business Studies LECTURER IN ECONOMICS

Applications are invited for the post of Lecturer in Economics. The successful candidate will be expected to teach Economics at the first degree level and to be available to teach Economics at the first degree level. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

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University of Birmingham

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Applications are invited for a temporary Lecturer in English Language. The successful candidate will be expected to teach English Language in the first two years of the BA programme and to be available to teach English Language in the first two years of the BA programme. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

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The City University Department of Social Sciences and Humanities LECTURER IN ECONOMICS

Applications are invited for the post of Lecturer in Economics. The successful candidate will be expected to teach Economics at the first degree level and to be available to teach Economics at the first degree level. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

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Applications are invited for the post of Programmer. The successful candidate will be expected to teach Programming at the first degree level and to be available to teach Programming at the first degree level. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

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Further particulars may be obtained from Mrs E. C. P. Sears, School of Modern Languages, University, Southampton SO9 5NH to whom applications (seven copies) with curriculum vitae and three referees should be sent, not later than 8th July, 1983.

University of Birmingham

LECTURERSHIP IN ENGLISH LANGUAGE

Applications are invited for a temporary Lecturer in English Language. The successful candidate will be expected to teach English Language in the first two years of the BA programme and to be available to teach English Language in the first two years of the BA programme. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

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Universities continued

University of Aberdeen Department of Engineering SENIOR LECTURERSHIP IN ENGINEERING

Applications are invited for the above post tenable from 1 October 1983 to 31 August 1984. The successful candidate will be expected to teach Engineering at the first degree level and to be available to teach Engineering at the first degree level. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

Further particulars may be obtained from Mrs E. C. P. Sears, School of Modern Languages, University, Southampton SO9 5NH to whom applications (seven copies) with curriculum vitae and three referees should be sent, not later than 8th July, 1983.

University of Newcastle Upon Tyne CHAIR OF STATISTICS

Applications are invited for the post of Chair of Statistics. The successful candidate will be expected to teach Statistics at the first degree level and to be available to teach Statistics at the first degree level. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

Further particulars may be obtained from Mrs E. C. P. Sears, School of Modern Languages, University, Southampton SO9 5NH to whom applications (seven copies) with curriculum vitae and three referees should be sent, not later than 8th July, 1983.

University of Birmingham

LECTURERSHIP IN ENGLISH LANGUAGE

Applications are invited for a temporary Lecturer in English Language. The successful candidate will be expected to teach English Language in the first two years of the BA programme and to be available to teach English Language in the first two years of the BA programme. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

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University of Birmingham

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University of Birmingham

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University of Birmingham

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University of Birmingham

LECTURERSHIP IN ENGLISH LANGUAGE

Applications are invited for a temporary Lecturer in English Language. The successful candidate will be expected to teach English Language in the first two years of the BA programme and to be available to teach English Language in the first two years of the BA programme. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

Further particulars may be obtained from Mrs E. C. P. Sears, School of Modern Languages, University, Southampton SO9 5NH to whom applications (seven copies) with curriculum vitae and three referees should be sent, not later than 8th July, 1983.

The University of Sheffield TEMPORARY LECTURERSHIP IN THE DEPARTMENT OF PURE MATHEMATICS

Applications are invited for the above post tenable from 1 October 1983 to 31 August 1984. The successful candidate will be expected to teach Pure Mathematics at the first degree level and to be available to teach Pure Mathematics at the first degree level. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

Further particulars may be obtained from Mrs E. C. P. Sears, School of Modern Languages, University, Southampton SO9 5NH to whom applications (seven copies) with curriculum vitae and three referees should be sent, not later than 8th July, 1983.

University of Bradford POSTGRADUATE SCHOOL OF STUDIES IN COMPUTING

Applications are invited for the post of Lecturer in Computing. The successful candidate will be expected to teach Computing at the first degree level and to be available to teach Computing at the first degree level. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

Further particulars may be obtained from Mrs E. C. P. Sears, School of Modern Languages, University, Southampton SO9 5NH to whom applications (seven copies) with curriculum vitae and three referees should be sent, not later than 8th July, 1983.

University of Birmingham

LECTURERSHIP IN ENGLISH LANGUAGE

Applications are invited for a temporary Lecturer in English Language. The successful candidate will be expected to teach English Language in the first two years of the BA programme and to be available to teach English Language in the first two years of the BA programme. The appointment will be for one year from 1st October, 1983. The salary will be within the first five points of the scale £7,100-£14,125 per annum.

Further particulars may be obtained from Mrs E. C. P. Sears, School of Modern Languages, University, Southampton SO9 5NH to whom applications (seven copies) with curriculum vitae and three referees should be sent, not later than 8th July, 1983.

University of Birmingham

LECTURERSHIP IN ENGLISH LANGUAGE

Applications are invited for a temporary Lecturer in English Language. The successful candidate will be expected to teach English

Polytechnics continued

SUNDERLAND POLYTECHNIC

Faculty of Engineering
DEPARTMENT OF ELECTRICAL, ELECTRONIC AND
CONTROL ENGINEERING

LECTURER GRADE II/
SENIOR LECTURER

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Following the award of significant additional funding for development in Information Technology, applications are requested for TWO permanent posts at the LII or SL grade. Candidates are sought with expertise/research interests in any area within the Department's interests, however applications from those having experience in the industrial application of microprocessor based systems, robotics, data communications and/or flexible manufacturing systems would be an advantage. Candidates should have a good Honours Degree or equivalent qualification; higher degree preferred. They should also offer appropriate industrial research and/or teaching experience. An application form and further particulars may be obtained from:

The Personnel Officer
Sunderland Polytechnic
Langham Tower
Ryhope Road, Sunderland, SR2 7EE
Closing date: 7th July, 1983.

North East London Polytechnic

Faculty of Engineering, Barking Precinct
Department of Manufacturing Studies and Mechanical Engineering

Lecturer II/SL:

Two posts in Manufacturing Studies

Applications are invited for lecturing appointments to commence in September, 1983.

Candidates should possess a relevant first or higher degree and have suitable industrial experience to teach Manufacturing Technology or Manufacturing Systems in final year degree and diploma students. Preference will be given to candidates who can also demonstrate an interest and ability to develop the teaching of one of the following: Flexible Manufacturing Systems; Robotics/Automation; CAD/CAM; Microcomputer Control of Processes.

Applicants will be encouraged and expected to conduct research in a Salary scale: £7,215-£11,688 p.a. + appropriate London Weighting allowance.

For further details and an application form please contact the Personnel Officer, North East London Polytechnic, 168/164 High Road, Chadwell Heath, Romford, Essex RM6 6JL or telephone 01-590 2773 quoting reference number E/183. Closing date for receipt of applications 4th July, 1983.

NELP North East London Polytechnic

SHEFFIELD CITY POLYTECHNIC

DEPARTMENT OF URBAN AND REGIONAL STUDIES

LECTURER II/
SENIOR LECTURER IN LAW

The successful applicant will be a professionally qualified lawyer who will teach the Law of Contract, the Law of Tort, the English Legal System and the Law of Property in an advanced level course. The successful applicant will also be responsible for the teaching of the Law of Contract, the Law of Tort, the English Legal System and the Law of Property in an advanced level course. The successful applicant will also be responsible for the teaching of the Law of Contract, the Law of Tort, the English Legal System and the Law of Property in an advanced level course.

Salary Scale: Lecturer II - £7,215 to £11,688
Senior Lecturer - £10,683 to £12,652 (bar)

Interested applicants may telephone the Department to discuss the post with the Head of Department, Mr A. Lister on 0742-2011, Ext. 338. Applications, forms and further details are available from the Personnel Officer, Sheffield City Polytechnic, 100-102, The Quadrant, Sheffield S1 1AB or by phoning 0114 276 347. Completed forms should be returned by 4th July 1983.

Sunderland Polytechnic

Faculty of Education
Department of Physical Education and Creative Studies

LECTURER II/SENIOR LECTURER IN EDUCATION

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited for the above post which relates to the Physical Education and Creative Studies Department. The successful applicant will be responsible for the teaching of Physical Education and Creative Studies in the Department. The successful applicant will also be responsible for the teaching of Physical Education and Creative Studies in the Department.

For further details and an application form please contact the Personnel Officer, Sunderland Polytechnic, 100-102, The Quadrant, Sunderland, Tyne and Wear, or by phoning 0191 276 347. Completed forms should be returned by 4th July 1983.

Closing date: 8 July 1983

Portsmouth Polytechnic

Department of Social Studies

LECTURER II/
SENIOR LECTURER

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited for the above post which relates to the Social Studies Department. The successful applicant will be responsible for the teaching of Social Studies in the Department. The successful applicant will also be responsible for the teaching of Social Studies in the Department.

For further details and an application form please contact the Personnel Officer, Portsmouth Polytechnic, 100-102, The Quadrant, Portsmouth, or by phoning 0705 276 347. Completed forms should be returned by 4th July 1983.

Closing date: 8 July 1983

KINGSTON POLYTECHNIC

School of Economics and Politics

TEMPORARY LECTURERS II

In Economics and Quantitative Methods

These are one year appointments from September 1983 made necessary by absence on leave of lecturers in the School. Applicants will be expected to teach micro, macro or development economics up to final year undergraduate level, or to teach economics and quantitative methods up to final year undergraduate level. Applicants should have a higher degree and preferably teaching and/or research experience. The ability to offer other specialisms in economics, or to offer quantitative methods to students on BTEC courses, would be an advantage.

Computing Education Centre

PRINCIPAL LECTURER AND
SENIOR LECTURER/LECTURER II

(2 posts)

We are seeking two new staff to develop, market and present further short courses in the areas of Computing, Information Technology and Office Automation. Applicants should have experience of working with computers, microcomputers or office automation products, perhaps in an education, marketing or customer support role.

Salary range: Principal Lecturer: £13,134-£16,356; Senior Lecturer: £11,299-£14,058; Lecturer II: £7,930-£12,183. Further details and application forms (to be returned by 4th July) from Academic Registrar, Kingston Polytechnic, Penryn Road, Kingston upon Thames KT1 2EE. Tel: 01-546 1388.

DUNDEE COLLEGE OF TECHNOLOGY

Department of Health Visiting and District Nursing

SENIOR LECTURESHIP
IN NURSING STUDIES

(Health Visiting and District Nursing)

Applicants must be registered both as health visitor and district nurse tutors; they should preferably be a graduate, also. The person appointed will have had relevant teaching and clinical experience and, in addition to undertaking appropriate teaching and research duties, will be required to lead the development of primary care courses within the college.

Salary scale: £12,228-£15,572 (bar)-£15,411, with initial placing depending upon approved previous experience. Financial assistance towards the cost of removal expenses may be payable.

Further particulars and application forms obtainable from the Personnel Officer, Dundee College of Technology, Bell Street, Dundee DD1 1HG, with whom applications should be lodged by 16th July, 1983.

PLYMOUTH POLYTECHNIC

Faculty of Technology

Department of Mechanical Engineering

Lecturer II/
Senior Lecturer

IN MECHANICAL ENGINEERING

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited from well qualified candidates with recent industrial experience, preferably in the area of Mechanical Engineering Design. Experience of Computer Aided Design would be an advantage.

Salary: £8,462-£12,141 (Level of appointment and starting salary depends upon qualifications and experience)

Application forms (to be returned by 16th July, 1983) can be obtained with further particulars from the Personnel Officer, Plymouth Polytechnic, Drake Circus, Plymouth PL4 8AA.

PLYMOUTH POLYTECHNIC

Learning Resources Centre

BUSINESS & MANAGEMENT LIBRARIAN

Lecturer II

(Salary Scale: £7,215-£11,688)

To be responsible for the co-ordination and development of library services for staff and students in the fields of Management and Business Studies, including the provision of appropriate user education services.

Candidates must be qualified librarians with academic qualifications in a relevant subject area.

Application forms, to be returned by 6th July, 1983, can be obtained with further particulars from the Personnel Officer, Plymouth Polytechnic, Drake Circus, Plymouth PL4 8AA.

Closing date: 8 July 1983

LOTHIAN REGIONAL COUNCIL

NAPIER COLLEGE OF COMMERCE AND TECHNOLOGY

DEPARTMENT OF EDUCATION

RESEARCH ASSISTANT
DEPARTMENT OF LANGUAGES

A vacancy exists for a Research Assistant in the field of French for Science and Technology.

The successful applicant will pursue research with a teaching team leading to: 1. Production and evaluation of French teaching modules; 2. Investigation of computer languages (e.g. STAFF author language) in relation to computer-assisted language learning. (A knowledge of German would also be useful).

The successful applicant will be expected to register for a higher degree. The appointment will be for 3 years.

Applicants with a degree qualification in science or technology will also be considered, given that they have fluency in French.

Salary on Scale £5,973-£7,791.

Application forms and further particulars may be obtained from the Administrative Officer (Personnel), Napier College, Colinton Road, Edinburgh EH10 8DT.

Closing date for applications is 8 July 1983.

Leicester Polytechnic

School of Electronic and Electrical Engineering

SERC RESEARCH STUDENTSHIPS

Leicester Polytechnic has an active research programme in the field of microelectronics and computer-aided design. We are seeking a research student to work on a project in the area of image processing and pattern recognition.

The successful candidate will be awarded a SERC research studentship for a period of three years, with a salary of £3,500 per annum. The student will be expected to register for a higher degree.

Further details can be obtained from Dr A. A. K. Smith, School of Electronic and Electrical Engineering, Leicester Polytechnic, LE1 7RH or by telephoning 0533 551551 ext 24.

Leicester Polytechnic

School of Electronic and Electrical Engineering

SERC RESEARCH STUDENTSHIPS

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The successful candidate will be awarded a SERC research studentship for a period of three years, with a salary of £3,500 per annum. The student will be expected to register for a higher degree.

Further details can be obtained from Dr A. A. K. Smith, School of Electronic and Electrical Engineering, Leicester Polytechnic, LE1 7RH or by telephoning 0533 551551 ext 24.

North Staffordshire Polytechnic

Computing Services Unit

MANAGER (SENIOR LECTURER/PRINCIPAL LECTURER)

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited from well qualified candidates with recent industrial experience, preferably in the area of Mechanical Engineering Design. Experience of Computer Aided Design would be an advantage.

Salary: £8,462-£12,141 (Level of appointment and starting salary depends upon qualifications and experience)

Application forms (to be returned by 16th July, 1983) can be obtained with further particulars from the Personnel Officer, North Staffordshire Polytechnic, 100-102, The Quadrant, Stoke-on-Trent, or by phoning 0930 276 347. Completed forms should be returned by 4th July, 1983.

University of Warwick

RESEARCH ASSOCIATE IN X-RAY METROLOGY

To work in the Centre for X-ray Metrology and in the Department of Physics, the successful candidate will be responsible for the development and application of X-ray metrology techniques in the field of microelectronics and computer-aided design.

The successful candidate will be awarded a research associate salary of £3,500 per annum. The candidate will be expected to register for a higher degree.

Further details can be obtained from Dr A. A. K. Smith, School of Electronic and Electrical Engineering, Leicester Polytechnic, LE1 7RH or by telephoning 0533 551551 ext 24.

The University of Wales Aberystwyth

POST-DOCTORAL RESEARCH ASSISTANT (MICROBIAL PHYSIOLOGY/BIOCHEMISTRY)

Applications are invited for a post-doctoral research assistant position in the Department of Microbiology and Immunology. The successful candidate will be responsible for the development and application of microbial physiology and biochemistry techniques in the field of microelectronics and computer-aided design.

The successful candidate will be awarded a post-doctoral research assistant salary of £3,500 per annum. The candidate will be expected to register for a higher degree.

Further details can be obtained from Dr A. A. K. Smith, School of Electronic and Electrical Engineering, Leicester Polytechnic, LE1 7RH or by telephoning 0533 551551 ext 24.

The University of Wales Aberystwyth

POST-DOCTORAL RESEARCH ASSISTANT (MICROBIAL PHYSIOLOGY/BIOCHEMISTRY)

Applications are invited for a post-doctoral research assistant position in the Department of Microbiology and Immunology. The successful candidate will be responsible for the development and application of microbial physiology and biochemistry techniques in the field of microelectronics and computer-aided design.

The successful candidate will be awarded a post-doctoral research assistant salary of £3,500 per annum. The candidate will be expected to register for a higher degree.

Further details can be obtained from Dr A. A. K. Smith, School of Electronic and Electrical Engineering, Leicester Polytechnic, LE1 7RH or by telephoning 0533 551551 ext 24.

Teesside Polytechnic

COURSES OFFICER

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited from well qualified candidates with recent industrial experience, preferably in the area of Mechanical Engineering Design. Experience of Computer Aided Design would be an advantage.

Salary: £8,462-£12,141 (Level of appointment and starting salary depends upon qualifications and experience)

Application forms (to be returned by 16th July, 1983) can be obtained with further particulars from the Personnel Officer, Teesside Polytechnic, 100-102, The Quadrant, Middlesbrough, or by phoning 01652 276 347. Completed forms should be returned by 4th July, 1983.

PLYMOUTH POLYTECHNIC

Learning Resources Centre

BUSINESS & MANAGEMENT LIBRARIAN

Lecturer II

(Salary Scale: £7,215-£11,688)

To be responsible for the co-ordination and development of library services for staff and students in the fields of Management and Business Studies, including the provision of appropriate user education services.

Candidates must be qualified librarians with academic qualifications in a relevant subject area.

Application forms, to be returned by 6th July, 1983, can be obtained with further particulars from the Personnel Officer, Plymouth Polytechnic, Drake Circus, Plymouth PL4 8AA.

Closing date: 8 July 1983

HUMBERSIDE COLLEGE OF HIGHER EDUCATION

FACULTY OF ARCHITECTURE, ART & DESIGN

PRINCIPAL LECTURER
CRITICAL & THEORETICAL STUDIES

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited for the above post which relates to the Critical and Theoretical Studies Department. The successful applicant will be responsible for the teaching of Critical and Theoretical Studies in the Department. The successful applicant will also be responsible for the teaching of Critical and Theoretical Studies in the Department.

For further details and an application form please contact the Personnel Officer, Humberside College of Higher Education, 100-102, The Quadrant, Humberside, or by phoning 01462 276 347. Completed forms should be returned by 4th July, 1983.

Hertfordshire County Council

Department of Social Studies

LECTURER II/
SENIOR LECTURER

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited for the above post which relates to the Social Studies Department. The successful applicant will be responsible for the teaching of Social Studies in the Department. The successful applicant will also be responsible for the teaching of Social Studies in the Department.

For further details and an application form please contact the Personnel Officer, Hertfordshire County Council, 100-102, The Quadrant, Hertford, or by phoning 0462 276 347. Completed forms should be returned by 4th July, 1983.

Hertfordshire County Council

Department of Social Studies

LECTURER II/
SENIOR LECTURER

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited for the above post which relates to the Social Studies Department. The successful applicant will be responsible for the teaching of Social Studies in the Department. The successful applicant will also be responsible for the teaching of Social Studies in the Department.

Colleges of Higher Education continued

West Glamorgan Institute of Higher Education Swansea

Head of School of Electronics
(Principal Lecturer)

Applications are invited from graduates in Electronics for the post of Head of School of Electronics. The successful applicant should have substantial experience in the field of microelectronics and in microcomputer technology. The possession of a research degree would be an advantage, as well as experience of teaching to honours degree standard. Recent research experience would be an important qualification for this appointment.

Head of School of Mechanical & Manufacturing Engineering
(Principal Lecturer)

Applications are invited from highly qualified mechanical and production engineers who have a proven record of teaching and industrial/research experience and can offer expertise and leadership in design, CAD/CAM/CAE or other specialism appropriate to high technology applications in the above disciplines. Application forms and further details are available from the Principal, West Glamorgan Institute of Higher Education, Tynrhyl Road, Swansea SA2 0UT. (Please send an S.A.E.) Closing date for applications: 8 July, 1983. Principal Lecturer: £12,519-£13,938 (bar)-£15,744.

EDUCATION COMMITTEE

Mid-Kent College of Higher and Further Education

Department of Management and Social Work Studies

PRINCIPAL LECTURER
In Advanced Nursing Studies

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited from well qualified candidates with recent industrial experience, preferably in the area of Mechanical Engineering Design. Experience of Computer Aided Design would be an advantage.

Salary: £8,462-£12,141 (Level of appointment and starting salary depends upon qualifications and experience)

Application forms (to be returned by 16th July, 1983) can be obtained with further particulars from the Personnel Officer, Mid-Kent College of Higher and Further Education, 100-102, The Quadrant, Maidstone, or by phoning 0622 276 347. Completed forms should be returned by 4th July, 1983.

KENT COUNTY COUNCIL

Department of Social Studies

LECTURER II/
SENIOR LECTURER

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited for the above post which relates to the Social Studies Department. The successful applicant will be responsible for the teaching of Social Studies in the Department. The successful applicant will also be responsible for the teaching of Social Studies in the Department.

For further details and an application form please contact the Personnel Officer, Kent County Council, 100-102, The Quadrant, Maidstone, or by phoning 0622 276 347. Completed forms should be returned by 4th July, 1983.

Hertfordshire County Council

Department of Social Studies

LECTURER II/
SENIOR LECTURER

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited for the above post which relates to the Social Studies Department. The successful applicant will be responsible for the teaching of Social Studies in the Department. The successful applicant will also be responsible for the teaching of Social Studies in the Department.

For further details and an application form please contact the Personnel Officer, Hertfordshire County Council, 100-102, The Quadrant, Hertford, or by phoning 0462 276 347. Completed forms should be returned by 4th July, 1983.

Hertfordshire County Council

Department of Social Studies

LECTURER II/
SENIOR LECTURER

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited for the above post which relates to the Social Studies Department. The successful applicant will be responsible for the teaching of Social Studies in the Department. The successful applicant will also be responsible for the teaching of Social Studies in the Department.

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Hertfordshire County Council

Department of Social Studies

LECTURER II/
SENIOR LECTURER

Salary Scale: LII - £7,215-£10,683 Bar-£11,688
SL - £10,683-£12,652 Bar-£13,443

Applications are invited for the above post which relates to the Social Studies Department. The successful applicant will be responsible for the teaching of Social Studies in the Department. The successful applicant will also be responsible for the teaching of Social Studies in the Department.

For further details and an application form please contact the Personnel Officer, Hertfordshire County Council, 100-102, The Quadrant, Hertford, or by phoning 0462 276 347. Completed forms should be returned by 4th July, 1983.

Hertfordshire County Council

Department of Social Studies

LECTURER II/
SENIOR LECTURER

Salary Scale: LII - £7,215-£10,683 Bar-£11,688

Colleges with Teacher Education

INNER LONDON EDUCATION AUTHORITY

GARNETT COLLEGE
Downshire House, Roehampton Lane
London SW15 4HR. (Tel: 01-769 6533)

Applications are invited for appointment as soon as possible to the following posts:

- 1 Senior Lecturer in Nursing Studies**
Applications are invited from experienced registered nurse tutors, preferably university graduates, who have had wide experience in general nursing. Teaching experience in FE might be an advantage.
- 2 Lecturer II in Secretarial and Office Studies**
The person appointed will be required to work as a member of a team and to share the teaching of method classes both to pre-service and in-service students. Candidates should have had several years' relevant teaching experience in FE.

Applications are also invited for the following TEMPORARY posts:

- 3 Lecturer II in Computer Applications**
To heighten awareness of the application of computer technology in a range of specialised subject areas, to keep abreast of current developments and encourage student teachers to be actively involved in computer applications from the outset of their careers. The teaching will also include some assistance with existing Educational Technology courses. It may be possible to arrange secondment. The post will probably be available for between one and two years.
- 4 Part-time Lecturer II in Vocational Preparation**
(0.5) required until the end of the 1983/84 academic year. Candidates should be currently involved in some aspects of vocational preparation teaching in FE. The appointee will be primarily concerned with the preparation of student teachers for work in this area. The appointment may be available through a 0.5 secondment arrangement.

Salary scales in accordance with the Burnham (FE) award effective from 1 April 1983 (subject to formal approval): Lecturer II £7,215-£11,568; Senior Lecturer £10,683-£12,352; all plus 1979 Inner London allowance. Starting point depending on qualifications, training and experience. Applicants should indicate for which post(s) they wish to receive details.

Further information and application forms, returnable within 10 days of the date of the advertisement, obtainable from the Principal (Ref*) at the above address.

Administration

SCOTTISH INSTITUTE OF ADULT EDUCATION

DIRECTOR

Salary £11,565-£15,084 p.a.

Applications are invited from men and women with a background in adult education and with administrative experience for the above post which becomes vacant on 1st September, 1983.

The Institute is a non-governmental organisation which encourages the provision and extension of education and training opportunities for adults.

Further details from:
The Hon Treasurer
Scottish Institute of Adult Education
30 Rutland Square
Edinburgh EH1 2BW
Tel: (031) 229 0331

The College of
Preceptors
ADMINISTRATIVE
APPOINTMENTS

The College of Preceptors, a long-established body which provides examination qualifications and membership for experienced teachers and educationists, invites applications from graduates for the following posts at its Essex headquarters:

- 1. Academic Administrator.** Applicants should be able to offer previous experience from an academic institution, educational administration, or with an examination body. Starting salary £2,400 p.a. (pay award pending).
- 2. Administrative Assistant.** This post is particularly suitable for a recent graduate who wishes to make a career in education. Starting salary £2,400 p.a. (pay award pending).

Further details from: The College of Preceptors, 100, The Quadrant, Colchester, Essex, CO1 1RN. Tel: 0206 25111. The closing date for applications is 15th July.

The College of
Preceptors
ADMINISTRATIVE
APPOINTMENTS

The College of Preceptors, a long-established body which provides examination qualifications and membership for experienced teachers and educationists, invites applications from graduates for the following posts at its Essex headquarters:

- ACADEMIC ADMINISTRATOR**
Applicants should be able to offer previous experience from an academic institution, educational administration, or with an examination body. Starting salary £2,400 p.a. (pay award pending).
- ADMINISTRATIVE ASSISTANT**
This post is particularly suitable for a recent graduate who wishes to make a career in education. Starting salary £2,400 p.a. (pay award pending).

Further details from: The College of Preceptors, 100, The Quadrant, Colchester, Essex, CO1 1RN. Tel: 0206 25111. The closing date for applications is 15th July.

University of
Birmingham
ADMINISTRATIVE
APPOINTMENTS

The University of Birmingham, a long-established body which provides examination qualifications and membership for experienced teachers and educationists, invites applications from graduates for the following posts at its Birmingham headquarters:

- ACADEMIC ADMINISTRATOR**
Applicants should be able to offer previous experience from an academic institution, educational administration, or with an examination body. Starting salary £2,400 p.a. (pay award pending).
- ADMINISTRATIVE ASSISTANT**
This post is particularly suitable for a recent graduate who wishes to make a career in education. Starting salary £2,400 p.a. (pay award pending).

Further details from: The University of Birmingham, 100, The Quadrant, Colchester, Essex, CO1 1RN. Tel: 0206 25111. The closing date for applications is 15th July.

University of
Southampton
Department of Mechanical
Engineering
ADMINISTRATOR

Applications are invited for the appointment of an Administrator in the Department of Mechanical Engineering. The administrator will be responsible for the day-to-day administration of the Department, including the management of the Department's finances, personnel, and facilities. The successful candidate will be a graduate with a degree in Mechanical Engineering or a related discipline, and will have at least two years' experience in a similar position. The salary is £11,565-£15,084 p.a.

Further details from: The University of Southampton, 100, The Quadrant, Colchester, Essex, CO1 1RN. Tel: 0206 25111. The closing date for applications is 15th July.

Further details from: The University of Southampton, 100, The Quadrant, Colchester, Essex, CO1 1RN. Tel: 0206 25111. The closing date for applications is 15th July.

Holidays and
Accommodation

GREEK ISLAND: Excellent but cheap accommodation on unspoiled islands. Phone: 01-244 4818.

Overseas

Papua New Guinea
LECTURER/SENIOR
LECTURER
(SEVERAL
POSITIONS)

The College of Preceptors, a long-established body which provides examination qualifications and membership for experienced teachers and educationists, invites applications from graduates for the following posts at its Essex headquarters:

- ACADEMIC ADMINISTRATOR**
Applicants should be able to offer previous experience from an academic institution, educational administration, or with an examination body. Starting salary £2,400 p.a. (pay award pending).
- ADMINISTRATIVE ASSISTANT**
This post is particularly suitable for a recent graduate who wishes to make a career in education. Starting salary £2,400 p.a. (pay award pending).

Further details from: The College of Preceptors, 100, The Quadrant, Colchester, Essex, CO1 1RN. Tel: 0206 25111. The closing date for applications is 15th July.

Further details from: The College of Preceptors, 100, The Quadrant, Colchester, Essex, CO1 1RN. Tel: 0206 25111. The closing date for applications is 15th July.



Western Australian
Institute of Technology

Tenured Appointments

SENIOR LECTURER
QUANTITY SURVEYING

Teach in the Quantity Surveying degree course, specifically in the area of prices and building economics, in the School of Architecture and Planning. Computer application experience in cost and energy modelling techniques essential. Eligibility for membership of the Australian Institute of Quantity Surveyors and relevant professional and teaching experience required; a higher degree advantageous. The appointee may be required to serve as Head of Department of Quantity Surveying (Ref 588).

SENIOR LECTURER
CRAFTS (TEXTILES
AND FIBRES)

An eminent crafts practitioner is required to assist the Course Controller of Crafts to teach and provide professional and academic leadership in the Textiles and Fibres section of the BA Degree in Crafts in the School of Art and Design. A postgraduate degree or equivalent is essential together with organisational and teaching experience in tertiary education (Ref 587).

SENIOR LECTURER
EARLY CHILDHOOD
EDUCATION

Teach, provide leadership and contribute to programme development in early childhood education at undergraduate and postgraduate levels in the Faculty of Education. Qualifications and experience are required in teaching strategies, curriculum and/or development and learning related to the early childhood field. Higher degree desirable (Ref 585).

SENIOR LECTURER
ANTHROPOLOGY

Teach Anthropology at undergraduate level, assist in planning future postgraduate offerings and provide academic leadership in the School of Social Sciences. Applicants require a postgraduate qualification in Anthropology and specialised experience in one or more of Australian Aboriginal Studies, South-east, South or East Asian Studies or other specialised area relevant to the School programme. A background in Applied Anthropology is desirable (Ref 586).

Salary range: \$20,000 - \$25,077. Qualifications: Candidates with lesser qualifications than stated above will be considered at other than the advertised level of appointment. Conditions include leave for spouse and family plus assistance with removal expenses; superannuation. Appointment Details including the names and addresses of three referees should be submitted in duplicate not later than 8th July 1983 to the Migration Office, Western Australia House, 115 Strand, London WC2R 0AL. When applying please quote Ref No and Code HES.

Teach in
North Africa

The Oil Companies School located in Tripoli, Libya, requires Elementary and Junior High School teachers who are familiar with the North American education system.

Positions include:
**CLASSROOM TEACHERS K-8,
PRIMARY MUSIC, Grades 4-9
PHYSICAL EDUCATION,
ART 7-9 and YEARBOOK**

Five years of successful teaching experience preferred. Experience in ESL/EFL teaching situation would be of benefit. Attractive salary and benefits.

Interviews will be held in London. Send complete applications and telephone number to:



UMM AL-JAWABY OIL SERVICE CO. LTD.,
33 Cavendish Square, London W1M 6HF.
Tel: 01-443 1443 Jawabi G. Attn: Roy Nash

Overseas continued

QUEENSLAND INSTITUTE OF
TECHNOLOGY
Brisbane, Australia

SCHOOL OF COMPUTING STUDIES

Head of School

The Institute is a federally funded, autonomous, multi-disciplinary college with a student population of around 7,500 located near to the city centre in sub-tropical Brisbane, Australia.

The School of Computing Studies has recently been established at the Institute and applications are invited from suitably qualified persons for the post of Head of School. Applicants must hold a relevant higher degree, demonstrate an active interest in computing and have a proven record as an effective administrator in either or both industry and academia. Salary is A\$46,977 pa. Assistance is provided towards removal costs.

It is intended to offer the post on a tenured basis, however, a contract appointment of up to three years' duration may be considered at the request of an applicant.

Further information is available from the Personnel Officer, Queensland Institute of Technology, George Street, Brisbane 4000, Australia.

Applications, quoting TS/83 together with full details including telephone contact and the names of three referees, to reach the Personnel Officer by Friday, 29th July 1983.

Program Secretary
of European Program

The Woodrow Wilson
International Center
for Scholars
in Washington, DC

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The author is Education Secretary of the National Association of Teachers in Further and Higher Education.